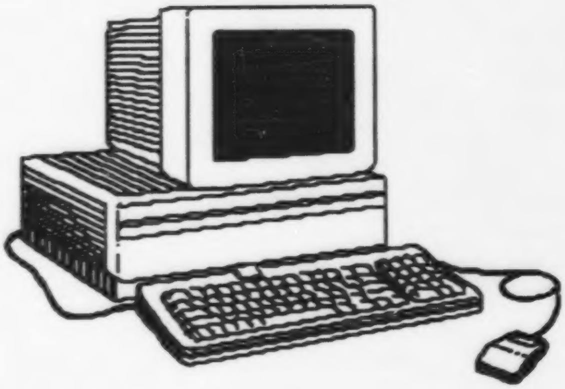
# List E

## A Detailed Report of Educational Software Evaluations



Nova Scotia
Department of
Education

Halifax
May 1991

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## Introduction

This is the fifth *Detailed Software Evaluation Report* produced by the Nova Scotia Department of Education. Through a process of screening and detailed evaluations, using a set of evaluation criteria agreed upon by the provincial Departments of Education across Canada, a list of approved software is created. This "listed" software may be acquired by schools in Nova Scotia through the Nova Scotia School Book Bureau using textbook allocation funds.

### Ordering Software

An order form, produced by the School Book Bureau, and distributed to school principals through district school board offices, may be used to acquire "listed" software. Please note that titles are listed in alphabetical order on the order form.

### District Purchase Plans and Site Licenses

Some software is available as a site license. This means that a school purchases the right to duplicate software for use on the computers within a school building. Available site licenses are noted on the order form. A district which is considering purchasing a number of copies from a particular publisher should investigate District Purchase Plans which may be arranged with the supplier directly and may be cheaper. Additional information is available by contacting the Microcomputer Resource Centre, Education Media Services, 6955 Bayers Road, Halifax, NS, B3L 4S4 (902) 453-2810.

### Using the Recommendations

In addition to software which is "listed" on the *Authorized List of Learning Materials*, this report includes evaluations of software which is recommended, recommended with reservations, rejected or no longer listed. The evaluation results in this report represent the information available at the time the report was written. Software may be rejected for a variety of reasons, including: too difficult to use, does not run properly, the content does not fit the Nova Scotia curriculum, or the methodology is not acceptable as good teaching practice. Individual teachers may agree or disagree with the reported results.

The intent of the report is to identify software that might be considered for use in Nova Scotia schools and to provide a means for obtaining that software. To date, this effort has been quite successful.

Schools may apply to the Department of Education through the district board to purchase software which is not on the *List of Authorized Instructional Materials*. Up to 10% of the credit allocation may be used for such purchases. Products which are recommended in the enclosed report will generally be accepted. Products which are rejected will generally be rejected on 10% applications.

### Scenarios

The Nova Scotia Department of Education is interested in collecting information on how software is used effectively in the classroom. Teachers are encouraged to send descriptions of successful learning experiences using software to Curriculum Division, Box 578, Halifax, NS, B3J 2S9. Refer to the scenarios included in the *Guidelines for Using Microcomputers in the Elementary School.*

LaJune Naud, Director
Curriculum Division
Nova Scotia Department of Education

May 1991

## Evaluation Level

| | |
|---|---|
| **New List —** | Refers to titles which have been added to the Authorized List of Learning Materials since order forms were distributed in January 1991 and are available from the School Book Bureau. |
| **Listed —** | Refers to titles from the Authorized List which were identified in previous reports. |
| **Recommend —** | Refers to titles which have been favorably reviewed by several classroom teachers based on use with students. |
| **Recom Rsv —** | Refers to titles which have been reviewed by classroom teachers but recommended with reservations due to curriculum fit, unusual equipment requirements, instructional format or limitations of information presented. |
| **In Progress —** | ***Accept 1st*** — program has been reviewed by a curriculum consultant and recommended for further evaluation. |
| | ***At Indepth*** — program is currently being field tested in classrooms. |
| **Rejected —** | ***Reject 1st*** — Program has been rejected during first level review by a curriculum consultant. Programs are rejected which do not run correctly, require unusual adaptations, contain errors or biases or are too limited in scope or instructional format. Programs are rejected if instructional format is inconsistent with principles of learning. |
| | ***Reject Dpt*** — Program has been rejected as a result of negative reviews by several classroom teachers. |

## Formats

| | |
|---|---|
| IIe | generally will run successfully on Apple IIe , IIc and IIgs or a Macintosh LC with Apple IIe card and IIe disk drives. |
| IIgs | requires the capability of a IIgs and will generally not run on a IIc or IIe or a Macintosh LC. |
| PCDOS | software requires IBM-BIOS and may not run successfully on compatible computers. |
| MSDOS | software has been run successfully on a variety of IBM and IBM-compatible computers. |
| T1000 | software is designed specifically for Tandy DOS and Tandy 1000. |
| C64 | generally will run successfully on C64 or C128 (in C64 mode). |
| C128 | will run on a Commodore 128 (in C128 mode). |
| Mac | software is designed specifically for Macintosh computers. |
| Amiga | software is designed specifically for Amiga computers. |
| IBM-25 | software is designed specifically to run on an IBM Model 25 computer. |

## Approved Software List

**816/Paint**
Supplier: Baudville
Format: IIgs
Evaluation Level: LISTED
Curriculum Codes: IT
Grade Levels: J

This program is a paint program which offers more options with twice as many colors as *Blazing Paddles*.

This program can introduce students to sketching using a computer, which is an essential introduction to drafting and, therefore, computer-aided drafting. It will also have applications in computer graphics and can be used to produce clip art for desktop publishing. In contrast to previous Apple II programs, it works with all Apple high-resolution graphics modes. The program requires a mouse. A lab pack of 6 sets of disks and site licenses are available. This program is shipped with both 3.5" and 5.25" disks.

**ACCPAC Bedford, Industry Standard**
Supplier: Computer Associates
Format: Mac MSDOS
Evaluation Level: LISTED
Curriculum Codes: BE
Grade Levels: S

*ACCPAC Bedford* is an integrated package which includes accounts payable, accounts receivable, payroll inventory and a general ledger system. Some prior knowledge of accounting procedures would be useful before using *ACCPAC Bedford* . The package is appropriate for accounting, level 12. The MSDOS format is available in either 3.5" or 5.25" disks.

**Adventures with Charts & Graphs — Project Zoo**
Supplier: National Geographic Society ED Services
Format: IIe
Evaluation Level: LISTED
Curriculum Codes: SC MA
Grade Levels: E I

*Project Zoo* is a multimedia courseware adventure in mathematics and science for students in grades three through five. Built around a zoo theme, it develops skills in graphing, measurement, map making and research; deepens understanding of the characteristics and survival needs of animals; and improves proficiency in problem solving. Students begin as visitors to a zoo and end by designing zoos of their own.

This software could be used in classrooms as a theme study. It supports independent learning in a child-centred classroom and promotes discussion, decision making, critical thinking and reinforcement of content. Also available in lab pack of three additional copies of each disk.

**AppleWorks 3.0**
Supplier: Apple Canada Inc.
Format: IIe
Evaluation Level: LISTED
Curriculum Codes: UT
Grade Levels: J S T

An integrated word processor, spreadsheet, and database program for the Apple II microcomputers. It is menu driven, has help available and comes with a full tutorial. *AppleWorks 3.0* provides new features throughout all three modules, including a built-in spelling checker, enhanced formatting and printing options, multiple-column mailing labels, 26 new spreadsheet functions, and improved integration between modules. It has increased power without altering the program's basic look and feel. Five new control key formatting commands have been added to streamline common operations in the word processing module. An improved zoom feature (Open Apple-Z) now hides all formatting options when you "zoom out" allowing the user a more accurate picture of the final output. The database has the ability to scroll horizontally in the multiple-record display. * **Please note** — When ordering, it is necessary to specify EITHER 5.25" OR 3.5". Both formats are no longer included in the single or multiple packages. Program is available in complete package or in 10-packs with one set of manuals and 10 diskettes. A site license is also available.

**Auto Sketch 2.0**
Supplier: Addison-Wesley Publishers Limited
Format: MSDOS
Evaluation Level: LISTED
Curriculum Codes: UT IT
Grade Levels: J

*Auto Sketch* is an object-oriented CAD program which has the advantage that it records objects such as circles with a particular center and radius and objects such as lines with particular end points. *Auto Sketch*, therefore uses mathematical definitions to produce images with considerable detail in contrast to most pixel-oriented software. Other features include: the capability of drawing with a mouse using convenient pull-down menu commands, automatic dimensioning and scaling, full pan and zoom capabilities, full undo and redo features. VGA or EGA monitor needed for color display.

This is a user-friendly computer-aided-drafting software featuring pull down menus. The content is relevant to the junior high industrial arts program for introductory and exploratory drafting and design courses. Where laboratory time is limited at the junior high level, teachers may also find relevance for the program at the senior high level. Available in 3.5" or 5.25" disks.

**Bank Street Writer III**
Supplier: Scholastic-TAB Publications Ltd.
Format: IIe MSDOS
Evaluation Level: LISTED
Curriculum Codes: UT
Grade Levels: E I J S T

This is a greatly enhanced version of Bank Street Writer which includes statistical functions, a large print (20-column) and on a separate diskette, normal size (40- or 80-column) display modes. The program contains an integrated spelling checker. A minimum 128K is required for the Apple version.

This is a significant improvement to a very easy-to-use word processing program. It can import and export ASCII files which permits sharing data files with other word processing programs. The integrated spelling checker saves users from loading a separate program, although some of the data on word frequency and corrected words is not available in this integrated version. MSDOS lab pack is out of print. Available in 3.5" or 5.25" disks.

**Bedford Accounting, Student Edition**
Supplier: Addison-Wesley Publishers Limited
Format: Mac MSDOS
Evaluation Level: LISTED
Curriculum Codes: BE
Grade Levels: S

*Bedford Accounting* is an accounting course within an integrated software package. Students perform the accounting procedures for each of five model companies. Each package involves the following procedures: accounts payable, accounts receivable, payroll inventory and a general ledger system. At the completion of the software, there is a project which allows the student to create his/her own business and to do the various accounting procedures for it. The student version does not accept dates later than January 21, 1986, nor does it include a separate tutorial disk. The tutorial data files are contained on the student disk with the program's files. The student can transfer data to other programs such as word processing and spreadsheets. Although a fundamental understanding of the accounting principles would make the student a more efficient user, the conceptual accounting development can take place during program utilization. This program is also available in French. A minimum purchase of 10 units is required.

**Better Working Eight In One**
Supplier: Spinnaker Software Corp.
Format: MSDOS
Evaluation Level: LISTED
Curriculum Codes: UT
Grade Levels: S T

This is an integrated package suitable for junior or senior high school. It consists of a word processor, database, desktop outliner, spell corrector, spreadsheet graphics, and communication. The package requires a minimum of 256K and a graphics adapter in order to provide graphics output. The program operates easily from pull-down menus on the screen. A hard disk drive is recommended. The word processing section is similar to *PFS Professional Write*. This program is available in 3.5" and 5.25" disks or in a combination pack containing both size disks. Also available in 5-disk lab packs in all size combinations.

**Biosolve 1 — Internal Medicine**
Supplier: D.C. Heath and Company
Formats: IIe MSDOS
Evaluation Level: NEW LIST
Curriculum Codes: SC HL
Grade levels: S

*Internal Medicine* is part of the *Biosolve* series which challenges students to use deductive reasoning in diagnosing simulated human biology problems. Students must use their knowledge of anatomy and deductive reasoning to solve problem situations. *Internal Medicine* is both motivational and user-friendly.

**Caddraw**
Supplier: Hearlihy & Co.
Format: IIe
Evaluation Level: LISTED
Curriculum Codes: IT
Grade Levels: J

The content is very relevant to the Nova Scotia industrial arts program. It conveys the standard drawing content used in our junior high drafting course as well as content related to our senior high architectural drafting and construction technology course.

*Caddraw* is designed for teaching the principles of CAD to beginning drafting and design students. With the program, students can create drawings in a variety of scales, including metric. The program includes the ability to center multiview or isometric drawings on any four title blocks and borders, create free-hand drawings, rotate text, lines, or symbols 360 degrees, and other techniques of computer assisted drafting. *Caddraw* is recommended for CAD in junior high introductory drafting and design and architectural drafting and electricity/electronics.

**Car Builder**
Supplier: Hearlihy & Co.
Format: IIe IIgs MSDOS IBM-25
Evaluation Level: NEW LIST
Curriculum Codes: IT
Grade Levels: J S

*Car Builder* is a simulation program that lets you design, construct, modify and test your own cars. *Car Builder* allows students to design an automobile from the chassis up. A variety of optional choices are available for the engine, chassis, front and rear suspension, steering, tires and brakes. Provisions are available to customize the body design. Designs can be tested through a simulated wind tunnel and test track and can also be used as a basis for a model to be developed in a manufacturing technology situation. All formats are also available in lab packs.

**Catlab**
Supplier: Conduit
Format: IIe MSDOS
Evaluation Level: LISTED
Curriculum Codes: SC
Grade Levels: S

This Mendelian genetics simulation program allows students to experiment with various genetic models and to gain an understanding of genotypes, genetic ratios, and monogenic traits. It provides an opportunity for students to plan strategies for data collection, to understand hypothesis testing, and to record and organize data. Students make decisions about breeding cats with specific traits, and the program logic determines the characteristics of the offspring. This program is also available in a 6-disk educator pack.

**Children's Writing and Publishing Center**
Supplier: Learning Company, The
Format: IIe MSDOS
Evaluation Level: LISTED
Curriculum Codes: LA UT
Grade Levels: I J

*Children's Writing and Publishing Center* lets you be the writer, editor, designer, illustrator and publisher all in one. Besides a library of pictures, the program has the ability to wrap text around pictures selected by the user.

The program has a helpful user's guide. It updates writing through revision, editing and publishing. It is easy to use by young children. A helpful sample lesson is included. Although suited for young children, formatting is limited. It is not a substitute for a flexible desktop publishing program. Also available in 6-disk lab pack. Both formats are available in either 3.5" or 5.25" disks.

**CNC Lathe (Part I) — CNC Machining & Program**
Supplier: Hearlihy & Co.
Format: IIe IIgs MSDOS
Evaluation Level: NEW LIST
Curriculum Codes: IT
Grade Levels: S

This piece of software contains five lessons: CNC Lathe Safety, CNC Lathe Setup, CNC Lathe Machining, CNC Lathe Vocabulary and CNC Lathe Maintenance. Both motivational and user-friendly, *CNC Lathe (Part I)* provides an introduction to numerical control of machine lathe. Sound, lively animation and graphics are used extensively. Detailed procedures and principles of computerized numerical control are defined as well as the skills required for successful NC tool operation.

**CNC Lathe (Part II) — CNC Machining & Program**
Supplier: Hearlihy & Co.
Format: IIe IIgs MSDOS
Evaluation Level: NEW LIST
Curriculum Codes: IT
Grade Levels: S

Continuation of *CNC Machining & Programming: CNC Lathe (Part I)*. The programs may be used individually or together as a complete unit. It teaches the five lessons: Computer Numerical Control Vocabulary, Simple CNC Lathe Operations, Tool Path Verification, NC Programming and Writing NC programs.

**Discrimination, Attributes & Rules**
Supplier: Sunburst Communications
Format: IIe
Evaluation Level: NEW LIST
Curriculum Codes: PS
Grade Levels: E I

*Discrimination, Attributes and Rules* is a large collection of problem-solving programs designed to follow the series, *Memory the First Steps*. Titles include: *Teddy's Playground* (working with attributes), *Iggy's Gnees* (discovering secret rules), *Odd One Out* (classification), *Gnee or Not Gnee* (Guessing rules from examples), *Tip 'N Flip* (visual discrimination, mental transposition), *High Wire Logic* (logic and attributes) and *Ten Clues* (using attributes as clues). Some of the titles may be purchased separately.

**Elastic Lines**
Supplier: Sunburst Communications
Format: IIe
Evaluation Level: LISTED
Curriculum Codes: MA
Grade Levels: I J

This is a computer version of using electronic geoboards to explore math concepts. The program is applicable at several levels and relates to many math topics. It is open-ended; students get to make choices as well as follow directions provided by the program. The program is appropriate for individual, small or large group instruction. It is easy to use with clear instructions. The useful teacher manual also has worksheets. Also available in a 10-disk lab pack.

**Factory, The**
Supplier: Sunburst Communications
Format: IIe C64 PCDOS T1000 IBM-25
Evaluation Level: LISTED
Curriculum Codes: PS
Grade Levels: I

The program helps to develop visual discrimination, spatial perception and logic by building simulated assembly lines of three types of machines.

*Factory* is a program designed to provide a highly visual, graphic, problem-solving experience. Throughout the program a learner must visualize and predict the effect a series of "machines" will have on a white, square product as it moves through them. A learner will use visual and spatial discrimination, will explore order and sequence, will plan a solution to a problem and test the solution. All formats also available in lab packs. An IBM 3.5 Network version can also be purchased.

**Generic CADD, Level 3.0**
Supplier: Hearlihy
Format: MSDOS
Evaluation Level: LISTED
Curriculum Codes: IT
Grade Levels: J S

*Generic CADD* has all the features students need to do serious drafting, including operator definable line widths, named views and fast redraws. The level 2.0 is an excellent entry level program for the full 5.0 edition. The former could be used at either the junior or senior high levels with the latter perhaps at the senior high level. Drawings can be completed neatly and accurately in a short amount of time; mistakes and changes are altered with ease. With exposure students become quite fluent with little frustration. Much can be learned by working with the program and the complexity of the drawings can be suited to the learner's ability. Math Co-processor is required in each computer running this program. This is available in a starter kit which includes Level 2.

**Geometric Supposer, Quadrilaterals**
Supplier: Sunburst Communications
Format: IIe Mac MSDOS IBM-25
Evaluation Level: LISTED
Curriculum Codes: MA
Grade Levels: S

*The Geometric Supposer, Quadrilaterals* is a microcomputer program that allows the user to carry out with ease constructions that are possible using straightedge and compass. These include the construction of quadrilaterals as well as the drawing of segements, parallels, perpendiculars, perpendicular bisectors, angle bisectors and inscribed and circumscribed circles. In addition, the user can measure lengths, angles, areas and distances as well as arithmetic combinations of these measures such as the sum of two angles, the product of two lengths, or the ratio of two areas. It provides an excellent learning environment for using a discovery approach in high school geometry and is easy to use. The program can be used effectively by individuals, small groups, or as an "electronic blackboard" with whole groups and a large display monitor. The Apple version is available in either 3.5" or 5.25" disks or an Appletalk Network version. There is also an IBM 3.5 Network version available. Each format can be purchased in a 10-disk lab pack.

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*Curriculum Codes:*
*BE Business Education* *CE Career Education* *CS Computer Science* *EC Early Childhood* *FS Family Studies*
*HL Health* *IT Industrial Arts Technology Education* *LA Language Arts* *MA Mathematics*
*MI Miscellaneous* *MU Music* *NU Nutrition* *PE Physical Ed.* *PS Problem Solving*
*SC Science* *SE Special Ed.* *SL Second Language* *SS Social Studies* *UT Utility*

**Geometric Supposer, Triangles**
Supplier: Sunburst Communications
Format: IIe Mac T1000 MSDOS IBM-25
Evaluation Level: LISTED
Curriculum Codes: MA
Grade Levels: S

This is a learning environment for discovering the rules and cases of triangle geometry. The program provides an excellent student-directed learning environment for using a discovery approach in high school geometry and is easy to use. The program can be used effectively by individuals, small groups, or as an "electronic blackboard" with whole groups and a large display monitor. The Apple version is available in 3.5" or 5.25" disks or an Appletalk Network version. Also available in an IBM 3.5 Network version. Each format can be purchased in a 10-disk lab pack.

**Gnee or Not Gnee, Discrimination, Attributes & Rules**
Supplier: Sunburst Communications
Formats: IIe C64 MSDOS
Evaluation Level: NEW LIST
Curriculum Codes: PS MA
Grade levels: E I

Students are given a set of shapes that follow a secret rule (Gnees) and Not Gnees. They are then presented with a third set and must determine from the examples which set fits the rule. The Apple format is available in both 3.5" and 5.25" disks and an Appletalk Network version. All formats are available in single copies or a 10-disk lab pack. This package is available separately or is included within the package *Discrimination, Attributes & Rules*.

**Graphical Analysis III**
Supplier: Vernier Software
Format: IIe MSDOS
Evaluation Level: LISTED
Curriculum Codes: SC
Grade Levels: S

This program allows students to type in experimental results and use this program to help them analyze the data. Data tables may be edited, printed and saved on disk. Data may be transferred to or from programs such as *Appleworks*. Students can graph experimental data and calculate slope, intercept and correlation coefficient. This program includes a site license. The MSDOS version is called *Graphical Analysis for MSDOS*.

**Graphing Equations/Green Globs**
Supplier: Sunburst Communications
Format: IIe T1000 MSDOS IBM-25
Evaluation Level: LISTED
Curriculum Codes: MA
Grade Levels: S

This program offers a variety of practice with graphing equations. *Graphing Equations* allows the student to draw the graph of various functions and to determine the equations of graphs drawn by the program. The simulation *Green Globs* included in this program is an excellent exercise for relating equations with points on the co-ordinate system and graphs. The program needs a color/graphics adapter or a CGA emulation program. A color monitor is preferred. Also available in a lab pack version.

**High Wire Logic, Discrimination, Attributes & Rules**
Supplier: Sunburst Communications
Format: IIe MSDOS
Evaluation Level: NEW LIST
Curriculum Codes: MA PS
Grade Levels: I

This program uses the Boolean logic to challenge students to learn about rules while developing their logic and discrimination skills. This package is available separately or is included within the package *Discrimination, Attributes & Rules*. The Apple format is available in both 3.5" and 5.25" disks as well as an Appletalk Network version. All formats are also available in 10-disk lab packs.

**Iggy's Gnees, Discrimination, Attributes & Rules**
Supplier: Sunburst Communications
Formats: IIe C64
Evaluation Level: NEW LIST
Curriculum Codes: MA PS
Grade levels: E I

Iggy is an inchworm which students guide to arrange colorful shapes to fit a secret rule. This program aids in visual discrimination and concept formation skills. The Apple format is available in both 3.5" and 5.25" disks as well as an Appletalk Network version. All formats are available in 10-disk lab packs. This package is available separately or is included within the package *Discrimination, Attributes & Rules*.

**Interpreting Graphs, Escape**
Supplier: Sunburst Communications
Format: IIe MSDOS IBM-25 T1000
Evaluation Level: LISTED
Curriculum Codes: MA
Grade Levels: J

The software helps students make meaningful intrepretations of graphs. A set of graphs and possible explanations is presented to the student for interpretation. The set is limited but well-done. The program includes a simulation in which the student must read and interpret graphs in a game situation. The program needs a color/graphics adapter or CGA emulation program. A color monitor is preferred. This is also available in lab packs for each format.

**Jenny's Journey**
Supplier: Minnesota Ed. Computing Consortium
Format: IIe MSDOS
Evaluation Level: LISTED
Curriculum Codes: SS
Grade Levels: I

This is a simulation designed to reinforce map-reading skills. The program places Aunt Jenny's car at some location on the Lake City map and challenges the student to get to some other location on that map. The program provides simulated map reading experiences. It is flexible because of the three levels of difficulty and the choices that are built into the program. It would require introductory map activities and would not replace work with creating actual maps. Distance is displayed in miles and speed is displayed in miles per hour. Both formats are available in 3.5" or 5.25" disks.

**Logo (Terrapin)**
Supplier: Terrapin
Format: IIe C64 Mac MSDOS
Evaluation Level: LISTED
Curriculum Codes: UT
Grade Levels: I J S

LOGO is a structured programming language. With the "turtle graphics" component it provides a highly visual, logical structure through which to explore cause and effect. Learners at all levels may find it useful.

LOGO is an extensive programming language for learners at all levels of programming skill. It provides a learning environment through which an educator can provide experiences of number, distance, direction, form, logic, sequence, modularity, repetition, patterning, and many others. With careful planning and attention, LOGO might be successfully used with learners as young as primary age through to adults. Unless materials are readily available, a teacher may find that he/she needs to do a fair amount of preparation before using LOGO. The MSDOS version is called *PC Logo*; Commodore version is called *Commodore Logo* and the 128K Apple version is called *Logo Plus*. Also available in lab packs of 5, 10 or 20 for the various formats.

**Logo II (LSCI) — Apple Logo II**
Supplier: Logo Computer Systems, Inc.
Format: IIe
Evaluation Level: LISTED
Curriculum Codes: UT
Grade Levels: I J S

LOGO is a structured programming language. With the "turtle graphics" component it provides a highly visual, logical structure through which to explore cause and effect. Learners at all levels may find it useful. *LSCI Logo II* is a PRODOS-based version of LOGO.

LOGO is an extensive programming language for learners at all levels of programming skill. It provides a learning environment through which an educator can provide experiences of number, distance, direction, form, logic, sequence, modularity, repetition, patterning and many others. With careful planning and attention, LOGO might be successfully used with learners as young as primary age through to adults. Unless materials are readily available, a teacher may find that he/she needs to do a fair amount of preparation before using LOGO. A site license is available for this program. This program is available in 3.5" or 5.25" disks and in 10-disk lab packs for each format.

**LogoWriter Intermediate**
Supplier: Logo Computer Systems, Inc.
Format: IIe IIgs MSDOS C64
Evaluation Level: LISTED
Curriculum Codes: UT
Grade Levels: I J

*LogoWriter* is a combination of the Logo computer language and a word processor. It has good support materials. A site license is available with a student copy option.

*LogoWriter* is a program which combines the graphics and programming features of LOGO with a simple word processor all in one environment. The LOGO language implementation in *LogoWriter* is significantly better than earlier versions of LOGO for young learners. Having the word processing capabilities and the turtle graphics functions in one

*Curriculum Codes:*
*BE Business Education*
*CE Career Education*
*CS Computer Science*
*EC Early Childhood*
*FS Family Studies*
*HL Health*
*IT Industrial Arts Technology Education*
*LA Language Arts*
*MA Mathematics*
*MI Miscellaneous*
*MU Music*
*NU Nutrition*
*PE Physical Ed.*
*PS Problem Solving*
*SC Science*
*SE Special Ed.*
*SL Second Language*
*SS Social Studies*
*UT Utility*

integrated environment provides learners with opportunities to explore shape and size, language and illustrations, and logic and form in a motivating way. The program is available in single packages, 6-disks lab packs or as a site license.The 128K Apple and the IBM versions are both available in 3.5" or 5.25" disks. Logowriter (French) for Apple and IBM is also listed. It is available in 3.5" and 5.25" disks for both formats and in 6-disk lab packs for all four formats.

**Lotus 1-2-3, Industry Standard**
Supplier: Lotus Development Corporation
Format: MSDOS
Evaluation Level: LISTED
Curriculum Codes: BE
Grade Levels: S

*Lotus 1-2-3* is a full-featured spreadsheet which can be used to create forms. It can produce both graphs and charts within a 256-column by 8192-row spreadsheet. It contains a "translate" utility to import and export files among other software packages. It is user-friendly and students seem to experience very little difficulty in using the package. It is available in individual packages or as a site license for use in multiple stations or through a network. Version 3.0 requires a 286 or 386 CPU, Version 2.2 is for slower CPU's. Available in 3.5" or 5.25" disks. A minimum purchase of six units is required.

**Lotus 1-2-3, Student Edition, Version 2.01**
Supplier: Addison-Wesley Publishers Limited
Format: MSDOS
Evaluation Level: LISTED
Curriculum Codes: BE
Grade Levels: S

This is a restricted version of *Lotus 1-2-3* — a blank spreadsheet which can be used to create forms, graphs and charts within a 256-column by 8192-row spreadsheet. Nine labs provide step-by-step tutorials with case studies, practice exercises and disk-based templates. It is appropriate for use in accounting, data processing and word processing. It can be used in conjunction with either *Century 21* or the "Kaluza" texts. It is user-friendly and students seem to experience very little difficulty in using the package. This would appear to be directly related to the quality of the reference section that accompanies the product. It is available in individual packages or as a site license for use in multiple stations or through a network. Available in 3.5" or 5.25" disks.

**MacDraft 2.0**
Supplier: Hearlihy
Format: Mac
Evaluation Level: LISTED
Curriculum Codes: UT IT
Grade Levels: S

This computer-assisted drafting package is menu driven and easy for beginners to use. Features include zoom, rotation, auto dimensioning and custom fill patterns. *MacDraft* offers 18 customary scales as well as 14 metric scales, including a conversion feature.

It is possible to zoom in on any part of the drawing up to eight times normal magnification. The rotation feature allows rotation of single or grouped objects in as little as one degree increments. The auto dimensioning lines display the proper size of the object regardless of the scale. The program is relevant to the junior high graphic communication course and at the cenior high level is appropriate for other areas such as manufacturing, construction and communications technology courses.

**Magic Slate II**
Supplier: Sunburst Communications
Format: IIe
Evaluation Level: LISTED
Curriculum Codes: UT
Grade Levels: E I J S T

This is a word processor with 20-, 40-, and 80-column display. In 20-column mode the letters are double size in both dimensions. Menu driven, the print-out is exactly as the screen shows. It should be considered for small children and sight-impaired and comes with a large manual and teaching guide.

Content is appropriate for grades three and up. The support materials are very comprehensive and provide all the necessary information for using the program in a variety of instructional settings. The "help" options use windowing techniques to display information in a small box on the screen. The 20-column version is an added bonus for primary teachers and those who want to make large text overhead transparencies. The 80-column version builds upon what the students have already learned, and is a full-featured word processing program with split screen capabilities and definable function keys to speed up performance. This program comes in either 3.5" or 5.25" disks for each of the column displays and in lab packs for each. There is also a complete set of 20-40-80-column display available. Also available in an Appletalk Network version.

**Math Activities Courseware 7**
Supplier: Houghton Mifflin Canada Ltd.
Format: IIe MSDOS C64
Evaluation Level: NEW LIST
Curriculum Codes: MA
Grade Levels: J

The concepts and skills embedded in the programs are mathematically and pedagogically sound and worthwhile. The presentation of ideas are appropriate; for example, number lines are used to visualize the ordering of rationals, and fraction ideas are approached intuitively rather than by rules. The strong emphasis on estimation in a number of activities provides students the opportunity to extend their skills in this area. The activities are motivating and require higher level thinking. Problem-solving games are included, and students may work co-operatively in small groups or competitively in pairs. The activity sheets require the students to provide feedback. This software provides a good preview and review of concepts students encounter in junior high classes.

**Math Activities Courseware 8**
Supplier: Houghton Mifflin Canada Ltd.
Format: IIe MSDOS C64
Evaluation Level: NEW LIST
Curriculum Codes: MA
Grade Levels: J

The concepts and skills embedded in the programs are mathematically and pedagogically sound and worthwhile. Current reinforcement is similar to the grade 7 set but is more challenging. Different formats and strategies are used. Includes a geometry simulation. Strong emphasis on estimation is continued.

**Mathematics Exploration Toolkit**
Supplier: IBM Canada Ltd.
Formats: MSDOS IBM-25
Evaluation Level: NEW LIST
Curriculum Codes: MA
Grade levels: S

*Mathematics Exploration Toolkit (MET)* is a set of tools for both teaching and learning mathematical concepts. *MET* can help users graph equations in three colors, perform matrix operations, evaluate definite integrals and manipulate trigonometric expressions. Students can manipulate symbols to solve the most advanced algebraic problems and multivariate equations quickly. The plotting feature allows for the simultaneous display of symbolic manipulations and the visual representation of symbols. The single pack and the LAN pack contain two 5.25" dual-sided program diskettes, one 3.5" program diskette and one set of documentation.

**Memory Castle, Memory — The First Step**
Supplier: Sunburst Communications
Format: IIe C64 PCDOS T1000
Evaluation Level: LISTED
Curriculum Codes: PS
Grade Levels: I

The program is a memory developing game with varying levels of difficulty. See *Memory: The First Step*. This program is available as part of the *Memory* package or as a separate program. Also available in a 10-disk lab pack. The Apple version is available in either 3.5" or 5.25" disks or an Appletalk Network version.

**Memory — The First Step**
Supplier: Sunburst Communications
Format: IIe PCDOS
Evaluation Level: LISTED
Curriculum Codes: PS
Grade Levels: E I

*Memory* is a very large primary to 6 package which includes ten programs and a complete set of teacher resource materials. All of the programs in the set are designed to develop a child's memory. *Simon Says*, *Teddy and Iggy*, and *What's in a Frame* are designed to give a learner practice in remembering sequences. *Concentration* is a computer version of the popular memory matching game. *First Things First* involves remembering shapes, while *Pick The Part* and *Was It There* involve remembering parts of a whole. *Regrouping* deals with the strategy of regrouping objects to remember them, *Self-testing* is practice in rehearsal and *Memory Castle* deals with remembering instructions. The complete package can be ordered and will include the ten programs and a handpuppet to use with some of the activities. Five of the ten programs noted above can be ordered individually. The teacher's resource materials include suggestions for classroom and computer activities, black-line masters and more.

**Microcomputer Keypad Operation**
Supplier: Nelson Canada Ltd.
Format: IIe T1000 MSDOS
Evaluation Level: LISTED
Curriculum Codes: BE
Grade Levels: S

This program provides a short course on using a numeric keypad by touch. In only a few hours, the student could become comfortable with either a calculator or computer keypad. The math section at the end of the program allows the student to demonstrate this new skill in a practical way.

A main menu with several activities listed in each option provides easy-to-follow instructions. Activities are short in duration and provide excellent feedback for student development. A student with no prior computer experience would have no difficulty in using this software. The Apple version is available only in 5.25" disks.

**Microsoft Works 2.0**
Supplier: Microsoft Canada Inc.
Format: Mac MSDOS
Evaluation Level: LISTED
Curriculum Codes: UT
Grade Levels: J S T

An integrated word processor, spell checker, spreadsheet, graphing, database and electronic communications program. It is controlled through menus or an optional mouse (MSDOS). Help is available on screen.

*Works* is a well-designed utility program in an integrated working environment. Text or data can be easily interchanged among the component programs, and each program can be used without exiting the system and reloading. A consistent set of keys are used to perform similar functions within each sub-program. It is appropriate for general use by a variety of students. It is available in individual packages or as a site license for use in multiple stations or through a network. The MSDOS format is available in 3.5" or 5.25" disks. The French version is also listed.

**More Teasers from Tobbs**
Supplier: Sunburst Communications
Format: IIe
Evaluation Level: LISTED
Curriculum Codes: MA
Grade Levels: I J

This math program expands the popular *Teaser* series to include fractions and decimals. It is a flexible piece of software which could be useful as one way of providing experiences with decimals and fractions. The focus is on having students decide what operation to use and instructing the computer to carry out the operation(s). It is open-ended — more than one answer is acceptable and options can be controlled by teachers. Available in 3.5" or 5.25" disks, an Appletalk Network version and 10-disk lab packs.

**Newsroom**
Supplier: Kobetek Systems Ltd.
Format: IIe C64 MSDOS
Evaluation Level: LISTED
Curriculum Codes: UT
Grade Levels: I J

*Newsroom* combines the writing/editing component of the word processor with graphics capabilities in a unique publishing environment. Students can use and modify a piece of clip art or create their own designs from scratch in the "Photo Lab." Their photos can be electronically pasted onto a panel with the text of a story written around it. A newspaper banner can be created and a newspaper page can be "laid out." The page can be printed or sent through the telephone lines to another computer also using *Newsroom*. Communications in the C64 version is limited to 300 BAUD. MSDOS version requires a Color Graphics Adaptor or simulated graphics. Although in use for several years, young children may find *Children's Writing and Publishing Centre* easier to use; junior high and later may prefer the flexibility of a desktop publishing program such as *PageMaker*.

**Odd One Out, Discrimination, Attributes & Rules**
Supplier: Sunburst Communications
Formats: IIe C64
Evaluation Level: NEW LIST
Curriculum Codes: PS MA
Grade levels: E I

A program for classification. Students are shown objects and must identify the one that doesn't fit. It can be ordered as a separate package and is included within *Discrimination, Attributes & Rules*. Both formats are also available in a 10-disk lab pack.

**Oxford Pascal**
Supplier: Kobetek Systems Ltd.
Format: C64
Evaluation Level: LISTED
Curriculum Codes: CS
Grade Levels: S

The program is an implementation of Pascal which contains both an interactive version and a compiled version of Pascal.This package is a full-featured implementation of the Pascal programming language for the Commodore 64 computer. It provides the standard Pascal commands and structures. *Oxford Pascal* includes two different programming environments. One is an interactive mode in which small programs can be coded and run immediately in a fashion similar to BASIC programs. The second mode provides an editor and compiler version for larger, faster executing programs. The language allows access to Commodore 64 graphics.

**PC Globe 4.0**
Supplier: PC Globe, Inc.
Formats: MSDOS
Evaluation Level: NEW LIST
Curriculum Codes: SS
Grade levels: J S

*PC Globe* is a versatile computerized world atlas that puts a wealth of maps and data at your fingertips. It contains an extensive database of information on 177 countries.

A quick retrieval database of world statistics, *PC Globe* also motivates students to explore and display geographic data. Topics match social studies curriculum. However, some data is insufficient for high school study.

**Pocket Filer 2**
Supplier: Digital Solutions Inc.
Format: C64/128
Evaluation Level: LISTED
Curriculum Codes: UT
Grade Levels: J S

*Pocket Filer 2* is a database program for C64 and C128 computers. The package contains both versions. The program is menu driven and works with a single file at a time. File size is limited by disk capacity and not memory. The three separate modes of "Create, Enter/Edit and Report" each must be exited and loaded separately which is somewhat time-consuming. Files can be searched by more than one characteristic and by a "contains" type of search. The program allows for the input and output of standard ASCII files. A "Superpack" containing the three *Pocket* programs is also available.

**Pocket Planner 2**
Supplier: Digital Solutions Inc.
Format: C64/128
Evaluation Level: LISTED
Curriculum Codes: UT
Grade Levels: J S

*Pocket Planner 2* is an easy-to-use electronic spreadsheet program for Commodore 64 (40-column) and C128 (80-column) computers. The package contains both programs.

In addition to normal features of a spreadsheet, there is an excellent graphing utility which prints in B\W or displays color on screen. Additional help is available throughout the program by pressing F7 or "Help" on C128. Cells are identified in letter and number format (e.g., A1,B4). Equivalent copy adjusts entire formulas for new locations. Absolute and relative values can't be mixed. A "Superpack" containing the three *Pocket* programs is also available.

**Pocket Writer 2**
Supplier: Digital Solutions Inc.
Format: C64/128
Evaluation Level: LISTED
Curriculum Codes: UT
Grade Levels: J S

This is an easy-to-use word processing program that contains modes for both 40- & 80-column modes on the C128, and 40-column mode on the C64. It is almost totally menu driven and is "WYSIWYG" screen formatting.

*Pocket Writer 2* is easy to use and displays on screen show what the printout will look like including italics, bold and underlining. The 80-column version is excellent (needs an RGB monitor). Editing on the 40-column version on the C64 is more difficult. The program allows for input and output of both ASCII and program type files. A "Superpack" containing the three *Pocket* programs is also available.

**Pond, The**
Supplier: Sunburst Communications
Format: IIe C64 PCDOS T1000
Evaluation Level: LISTED
Curriculum Codes: PS
Grade Levels: E I

*The Pond* is a program that encourages children to search for patterns and formulate a hypothesis in a graphic environment. The learner must move a frog from lily pad to lily pad to determine a pattern that will allow the frog to cross the pond without getting wet.

The learner will discover order and sequence, may improve perception and will use an experimental process to solve a two- to three-step problem. Also available in lab packs and an IBM 3.5 Network version.

**Print Shop, The**
Supplier: Broderbund
Format: IIe C64 MSDOS/Tandy
Evaluation Level: LISTED

Curriculum Codes: UT
Grade Levels: E I J T

A graphics and print utility program, it allows the user to create and print greeting cards, signs, letterhead and banners. It is a simple-to-use, menu-driven. The Apple II and MSDOS versions are the current *New Print Shop* which include the ability to add more than one graphic design and to manipulate graphics in size, color (needs color printer) and vertical or horizontal orientation. Font size and appearance is more varied, and this version includes a calendar. Users can select from menus using mouse or joystick. Two disk drives or a fixed disk drive are recommended. The IBM/Tandy version is available in 3.5" or 5.25" disks.

**Puzzle Tanks**
Supplier: Sunburst Communications
Format: IIe C64 T1000 PCDOS IBM-25
Evaluation Level: LISTED
Curriculum Codes: PS MA
Grade Levels: I J

*Puzzle Tanks* is a computer version of the old problem in which you have two ungraduated beakers and an unmeasured amount of liquid. Your task is to arrive at a specific measure of the liquid by pouring back and forth between the beakers. For example — given beakers of capacity 9 litres and 6 litres can you get 3 litres? Yes, fill the 9 litre beaker, pour off enough to fill the 6 litre beaker and you will have 3 litres left. Puzzle Tanks creates an animated graphics implementation of these problems. There are various levels of difficulty, including some problems that are impossible (given tanks holding 2 litres and 4 litres, try to get 3 litres.) The Apple program is also available in an Appletalk Network version. All formats are available in 10-disk lab packs.

**Regrouping, Memory — A First Step**
Supplier: Sunburst Communications
Format: IIe
Evaluation Level: LISTED
Curriculum Codes: PS MA
Grade Levels: E

This is a package consisting of three programs to provide practice in regrouping as a memory strategy. See *Memory: The First Step*. This program is part of the full package or can be ordered separately. Available in either 3.5" or 5.25" disks, an Appletalk Network version or a 10-disk lab pack.

**Right Turn**
Supplier: Sunburst Communications
Format: IIe C64 T1000 PCDOS IBM-25
Evaluation Level: LISTED
Curriculum Codes: MA
Grade Levels: I J

A program to allow students to experiment with mathematical transformations, it also provides practice in analysing a problem and predicting an outcome.

*Right Turn* creates an environment for experimenting with the transformations — reflections and rotations (flips and turns). The learner is presented with a three-by-three array of colored squares. A second array shows the result of applying a transformation to the given array. The learner must determine the kind of transformation and then apply that transformation to a new array. This program supports the objectives of the geometry part of the mathematics curriculum. The Apple version is available in a 3.5" or 5.25" disk format or an Appletalk Network version. All formats are available in a 10-disk lab pack as well.

**Robcat**
Supplier: Hearlihy & Co.
Format: IIe
Evaluation Level: LISTED
Curriculum Codes: IT
Grade Levels: S

The program represents industrial robotics — fundamentals of robotic programming and problem-solving techniques. This program is just one type of robotics (servo) — point to point.

*Robcat* provides a visual means by which students can learn and explore the area of robotic technology. The software allows the student to manually operate a robot or to train a robot to perform automated operations. Also available in 5-disk lab pack.

**Science Toolkit, Module 1 — Speed and Motion**
Supplier: Broderbund
Format: IIe MSDOS
Evaluation Level: LISTED
Curriculum Codes: SC
Grade Levels: I J

This is Module 1 of a series of add-on kits for the *Science Toolkit Plus* which allows students to discover factors concerning speed, acceleration and rotation. The kit includes an additional photocell, manual and a balloon-powered car.

The concept of speed and acceleration can be demonstrated and the equipment allows for self-designed experiments. Needs *Science Toolkit Plus, Master Module*. The MSDOS/Tandy version is available in either 3.5" or 5.25" disks.

**Science Toolkit Plus (Master Module)**
Supplier: Broderbund
Format: IIe MSDOS T1000
Evaluation Level: LISTED
Curriculum Codes: SC
Grade Levels: I J S

*Science Toolkit Plus* consists of a simple interfacing tool to be used primarily in the science program. By plugging a photocell or temperature probe into a supplemental connector, the computer accurately computes temperature and light levels.

This program will fit into the upper elementary and junior science program. It can be used to measure and compare temperatures and light levels, graphs or time experiments. It can save and print data in units assigned by the student. A number of supplementary modules permit experiments in speed, vibration and human physiology. T1000 version is supplied with round game port plug. MSDOS version needs optional games port adapter. Both Tandy and MSDOS versions are available in 3.5" or 5.25" disks.

**Sensible Speller**
Supplier: Sensible Software Inc.
Format: IIe
Evaluation Level: LISTED
Curriculum Codes: UT
Grade Levels: S

This is a spelling checker for Apple PRODOS word processors including *Appleworks*. The program is available in 3.5" and 5.25" disk formats. Using the disk-based "Random House Dictionary," text files from a variety of word processing programs can be checked. Users can also look up words in the dictionary using wild card characters to replace letters of which they are unsure.

In order to use *Sensible Speller*, users must first exit the word processing program and then load the speller program. The program must load and check the complete text file before identifying suspect words. Identifying the location of the dictionary is slightly confusing in a program that is otherwise menu driven. The program lists on screen and/or printer a word frequency table in alphabetical order for all words in the text, a list of suspect words and a list of words that were corrected with their replacement. The last item could be used to create customized spelling lists for each student.

**SimCity**
Supplier: Broderbund
Formats: MSDOS C64 Mac
Evaluation Level: NEW LIST
Curriculum Codes: SS
Grade levels: J S

*SimCity* is the first of a new type of entertainment/education software called system simulations. You are provided with rules and tools which help create your system, in this case a city. You have to figure out how the system works and take control of it.

*SimCity* permits students to simulate urban development. Users must assume the position of mayor and make decisions based on what is currently required. Periodic checking may be done in order to preview the updated work evaluation. A CGA monitor and 640 K of memory is recommended.

**Simon Says..., Memory — A First Step**
Supplier: Sunburst Communications
Format: IIe C64
Evaluation Level: LISTED
Curriculum Codes: PS
Grade Levels: E

*Simon Says* is a program for developing memory. Students are asked to remember a sequence of colors, letters or numbers. See *Memory: A First Step*. The Apple version is available in either 3.5" or 5.25" disks. All formats are available in a 10-disk lab pack.

**Sir Isaac Newton's Games**
Supplier: Sunburst Communications
Format: IIe T1000 PCDOS IBM-25
Evaluation Level: LISTED
Curriculum Codes: SC
Grade Levels: J S

Discover the effect of the Laws of Newton on objects in various environments. Newton's Laws of Motion are built into the graphics screen of the computer in this program. Learners are given the opportunity to discover for themselves what it is like to apply forces in a particular direction in a frictionless environment or to discover the effect of the gravitational pull of the sun on an object in space. They can compare movement on grass with movement on sand or ice. While the program does not formalize the Laws of Motion, students can see the effect and can experiment to obtain various results. All formats also available in 10-disk lab packs.

### Small Engine Repair Shop

Supplier: Hearlihy & Co.
Formats: IIe MSDOS
Evaluation Level: NEW LIST
Curriculum Codes: IT
Grade levels: S

This program is designed to challenge your ability to diagnose common small engine problems. You will diagnose five engines each time you play. Each will have different problems. You determine the problem and your score determines your rank.

This user-friendly program develops and tests a student's knowledge of a common small engine. The student must use their acquired knowledge, problem-solving skills and decision-making abilities to pinpoint the problem which is causing the engine failure. There are five different simulations to solve. This may be worked on individually or in groups.

### Superfactory, The

Supplier: Sunburst Communications
Format: IIe PCDOS T1000 IBM-25
Evaluation Level: LISTED
Curriculum Codes: PS
Grade Levels: J

In this program, students become familiar with the properties of a three-dimensional cube while learning the four steps of problem solving.

*Superfactory* is an enhanced version of *Factory*. It presents a highly visual, three-dimensional graphic problem-solving experience. Throughout the program a learner must visualize and predict the effect a series of actions will have on a cube. The learner will use visual and spatial discrimination, will explore order and sequence, will plan the solution to a problem and will test the solution. The Apple version is available in 3.5" or 5.25" disks. All formats available in a 10-disk lab pack.

### Superkey

Supplier: Scholastic-TAB Publications Ltd.
Format: IIe
Evaluation Level: LISTED
Curriculum Codes: UT
Grade Levels: J

*Superkey* is a typing tutorial program for Apple II computers designed to give practice in correct fingering on a keyboard. It is recommended that an overall plan for keyboard instruction which includes paper-based activities, proper use of fingering techniques while writing in the word processor and experience with a program such as *Superkey* be developed. Also available in a 10-disk lab pack.

### SuperPaint 2.0

Supplier: Silicon Beach Software
Format: Mac
Evaluation Level: LISTED
Curriculum Codes: IT UT
Grade Levels: J S T

*SuperPaint* is a graphics creation program that features a layer for dot-by-dot editing (paint) and one for manipulating objects (draw). It contains a utility to convert a dot-mapped image to a "draw" image. Version 2.0 requires version 6.0 or later of the Macintosh operating system.

Instructions in the manual are conveniently illustrated between the appropriate graphics, and are clearly shown. The graphic illustration and manipulation by the mouse is very well done and adds to the convenience of operating the program. The program has been significantly upgraded from version 1 with enhancements to the "draw" mode which permit flexibility in stretching, rotating and flipping a figure that would be normally available in the "paint" mode.

### Teasers by Tobbs With Whole Numbers

Supplier: Sunburst Communications
Format: IIe C64 T1000 MSDOS IBM-25
Evaluation Level: LISTED
Curriculum Codes: MA
Grade Levels: E I

In *Teasers* students are presented with a grid that they must complete to create a true operations table. The program has six levels of difficulty in both addition and multiplication. Students may pass, go to a new puzzle, get help or escape at any time. The program allows the student to be a thinker and organizer. At the higher levels, questions have a variety of acceptible answers. An IBM 3.5 Network version is also available. All formats can be purchased in a 10-disk lab pack as well.

### Teddy and Iggy, Memory — A First Step

Supplier: Sunburst Communications
Format: IIe C64
Evaluation Level: LISTED
Curriculum Codes: PS
Grade Levels: E

The program provides practice in remembering sequences. See *Memory: A First Step*. The Apple format is available in 3.5" or 5.25" disks. Also available in 10-disk lab packs for all formats.

### Teddy's Playground, Discrimination, Attributes & Rules

Supplier: Sunburst Communications
Formats: IIe
Evaluation Level: NEW LIST
Curriculum Code: PS MA
Grade level: E I

Develops critical-thinking skills as students work with attributes: shapes, colors and shading. It is available in both 3.5" and 5.25" disks, in an Appletalk Network version and in a 10-disk lab pack for both size disks. This package is available separately or is included within the package *Discrimination, Attributes & Rules.*

### Ten Clues, Discrimination, Attributes & Rules

Supplier: Sunburst Communications
Formats: IIe MSDOS
Evaluation Level: NEW LIST
Curriculum Code: PS MA
Grade level: I J

Students must rely on reasoning abilities to decipher a message using individual clues. A "mystery message" is also solved by using both variable and critical attributes. Students may also create their own clues around a word or "mystery" message. Both formats are available in a 10-disk lab pack. This package is available separately or is included within the package *Discrimination, Attributes & Rules*.

### Tip 'N Flip, Discrimination, Attributes & Rules

Supplier: Sunburst Communications
Formats: IIe MSDOS
Evaluation Level: NEW LIST
Curriculum Code: PS MA
Grade level: I J

The computer specifies a design which the student must try to match by flipping a pattern. The Apple format is available in both 3.5" and 5.25" disks and in an Appletalk Network version. All formats are available in a 10-disk lab pack. This package is available separately or is included within the package *Discrimination, Attributes & Rules.*

### TurboPascal 6.0

Supplier: Borland International
Format: MSDOS
Evaluation Level: LISTED
Curriculum Codes: UT CS
Grade Levels: S

This is the common *Turbo Pascal* language which requires a CP/M card to operate on an IIe. *TurboPascal* is a full-featured implementation of the Pascal programming language for Apple and IBM computers. The Apple version will only operate in computers that are equipped with a CP/M 80 card. *TurboPascal* is a traditional version of the language. The IBM version allows some access to graphics, however the Apple II version does not. *TurboPascal* is an industry standard for the Pascal language. It is very fast and conforms to established conventions. The editor contained in the program is similar to *Wordstar*. Stand-alone programs can be developed.

### What is in a Frame?, Memory — A First Step

Supplier: Sunburst Communications
Format: IIe
Evaluation Level: LISTED
Curriculum Codes: PS
Grade Levels: E I

In this program students are shown a number of objects in a picture frame and then are asked to remember what they have seen. See *Memory: A First Step*. This is available in 3.5" or 5.25" disks, an Appletalk Network version and 10-disk lab packs in both size disks.

### Where in the World is Carmen Sandiego?

Supplier: Broderbund
Format: IIe IIgs C64 MSDOS Mac
Evaluation Level: LISTED
Curriculum Codes: SS
Grade Levels: I

This is a simulation program in which the child acts as a detective for Interpol who must track a criminal around the world by interpreting clues and researching facts. *Where in the World is Carmen Sandiego?* is an interactive adventure simulation in which the child must decipher clues to solve a mystery and capture a thief. The "World Almanac" which comes with the program can be used to solve the clues provided in the various scenarios. This is an excellent, highly motivating program, one which would enhance the development of research skills. All formats are also available in lab packs.

*Curriculum Codes:*
*BE Business Education*
*HL Health*
*MI Miscellaneous*
*SC Science*
*CE Career Education*
*IT Industrial Arts Technology Education*
*MU Music*
*SE Special Ed.*
*CS Computer Science*
*NU Nutrition*
*SL Second Language*
*EC Early Childhood*
*LA Language Arts*
*PE Physical Ed.*
*SS Social Studies*
*FS Family Studies*
*MA Mathematics*
*PS Problem Solving*
*UT Utility*

**Word Play**
Supplier: Hartley Courseware Inc.
Format: IIe
Evaluation Level: LISTED
Curriculum Codes: LA SS MA
Grade Levels: E

*Word Play* encourages students to make predictions, take risks, reason, solve problems, use spelling and relate to previous experiences.The program gives opportunities to play with words — through words being jumbled, words being considered in various classifications and cryptograms.

The program is highly recommended because it has built-in motivation. It helps develop deductions regarding most common vowels and consonants that appear in words. Categories are provided beforehand, which gives a focus for each game.

**WordPerfect 5.1**
Supplier: WordPerfect Corporation
Format: MSDOS
Evaluation Level: LISTED
Curriculum Codes: BE UT
Grade Levels: S

This comprehensive word processing package is industry standard. It features speller, a thesaurus, built-in mathematics functions and elaborate merging features. File sizes are limited only by the capacity of the disk. Online help is available. The screen can be split horizontally allowing the user to operate and switch between two files. DOS commands are accessible from within the *WordPerfect* program. The graphics feature allows the importation of graphics and the creation of lines and boxes. The classroom workbook is a useful supplement to the software. The documentation of this program is well-organized, comprehensive and sequential.

The program is available for single work stations or as a networkable version (see order form from NSSBB). *WordPerfect* uses function keys in combination with the alternate, control and shift keys to access most functions including save and underline. The program can import and export ASCII files. The student version of *WordPerfect* will also meet the needs of the word/information processing course. A site license and volume discount are available. Please read the order form from the NSSBB carefully. A hard disk drive is highly recommended. This program can be purchased with 3.5" or 5.25" disks.

**WordPerfect (French) 5.0**
Supplier: WordPerfect Corporation
Format: MSDOS
Evaluation Level: LISTED
Curriculum Codes: BE UT
Grade Levels: S

This comprehensive word processing package is industry standard. It includes a spellchecker, a thesaurus, built-in mathematics functions and elaborate merging features. File sizes are limited only by the capacity of the disk. Online help is available. The screen can be split horizontally allowing the user to operate and switch between two files. DOS commands are accessible from within the *WordPerfect* program. The graphics feature allows the importation of graphics and the creation of lines and boxes. The classroom workbook is a useful supplement to the software. The documentation of this program is well-organized, comprehensive and sequential.

The program is available for single workstations or as a networkable version. *WordPerfect* uses function keys in combination with the alternate, control and shift keys to access most functions including save and underline. The program can import and export ASCII files. A hard disk is recommended. It is available in individual packages in either 3.5" or 5.25" disks or a site license for use in multiple stations or through a network. A hard disk drive is highly recommended.

**Writer's Helper Stage II, Version 2.0**
Supplier: Conduit
Format: IIe MSDOS
Evaluation Level: LISTED
Curriculum Codes: LA
Grade Levels: J S

This is a totally updated version of *Writer's Helper*. It is designed to help reluctant writers gather and organize ideas for a writing project. Activities are divided into a disk of pre-writing and a disk of revising tools. Files which are prepared using this program can be saved to diskette and edited using common PRODOS-based word processing programs such as *Apple Works*. Teachers can easily customize each "start-up" disk to vary the pre-writing and revising activities and data disk available to each student.

The program helps students in the initial "idea generating" stage of writing by providing a number of pre-writing activities in a varied and interesting fashion. Once the student has been helped to generate a writing idea, the revising activities can be used to polish and improve. The program would be a valuable aid to students to develop writing process skills and should enable them to help see themselves as writing craftsmen. The program is easy to use and supports a fine range of word processors and printers. The program appeals to those students who are serious about wanting to improve their writing skills. It is less of a help to the unmotivated. The program is slow to load and first-time users may be confused by menu selections. (Needs enhanced IIe/c/gs.) A site license is available for this program. Both formats are available in 3.5" or 5.25" disks and in 6-, 15- or 25-disk educator packs for either disk size.

## Recommended Software

**Addition, Math Tutor**
Supplier: Scholastic-TAB Publications Ltd.
Format: IIe
Evaluation Level: RECOM RSV
Curriculum Codes: MA
Grade Levels: E I

The program provides step-by-step instruction and repetition of basic arithmetic skills. The program is a good supplement for special education, resource or regular classroom use. Some students found the directions difficult to follow and needed teacher assistance initially. Program contains some recordkeeping and placement tests, but placement tests merely assign a starting level and do not provide feedback on specific competence.

**Aldus PageMaker 4.0**
Supplier: Aldus Corporation
Format: Mac MSDOS
Evaluation Level: RECOMMEND
Curriculum Codes: UT
Grade Levels: S T

The program offers complete flexibility in design in desktop publishing. It allows columns of varying widths, prints type as large as 127 points, imports text typed on a word processor which can be edited on *PageMaker's* built-in text editor, lets user set up style sheets to pre-define every part of a document, imports illustrations or graphics directly into pages which can be cropped or scaled to fit, provides automatic left-right page orientation and flow of text from page to page, and produces near-typeset-quality pages when printed on a laser printer.

This is an industry standard, desktop publishing program. Text and graphics can be imported in various formats from a variety of word processing and paint programs. (See also *Ready, Set, Go.*)

**Aldus PageMaker 4.0, Student Edition**
Supplier: Addison-Wesley Publishers Limited
Format: Mac MSDOS
Evaluation Level: RECOMMEND
Curriculum Codes: IT UT
Grade Levels: J S

Aldus *PageMaker* is a powerful tool for designing, editing and producing printed messages. It combines superior layout capabilities with excellent graphics and text editing features. This student edition is fully compatible with the professional version.

Aldus *Pagemaker 4.0, Student Edition* possesses the majority of features used within the commercial version. The student edition limits documents to 12 pages and only 10 copies of documents may be requested at one time.

**Alpine Tram Ride**
Supplier: Learning Company, The
Format: IIe
Evaluation Level: RECOM RSV
Curriculum Codes: PS
Grade Levels: I

*Alpine Tram Ride* will develop the following problem-solving strategies: analyzing clues, making inferences, drawing logical conclusions, detecting patterns and experimenting with solutions.

The program allows students to experience a variety of problem-solving strategies and would be of greatest benefit in a small group situation where solutions can be discussed and analysed. Development of efficient recording techniques should be encouraged as an important aspect of the program.

**AppleWorks GS 2.1**
Supplier: Claris
Format: IIgs
Evaluation Level: RECOM RSV
Curriculum Codes: LA
Grade Levels: J S

This is a version of *AppleWorks* specifically designed for the IIgs. It requires a minimum of 1.25 MB of memory, and a hard disk is recommended. The program includes a spell checker, dictionary and communications package.

The program is very slow to load. It will not load from the older Unidisk, only from a regular 3.5" platinum disk drive. Changing between modes (word processor, database, etc.) is slow. It does display on screen the printed format of data (wysiwyg) such as italics, bold and underlining. While program includes desktop publishing, communications and paint, it is not recommended for use without a hard disk because of frequent swapping of three or four 3.5" diskettes.

**Bank Street Speller**
Supplier: Broderbund
Format: IIe MSDOS C64
Evaluation Level: RECOM RSV
Curriculum Codes: UT

Grade Levels: I J

The program is a spelling checker to accompany *Bank Street Writer*. A good spelling checker, but it is limited to *Bank Street Writer* files and must be loaded separately. Provides information on frequency and spellings which can be printed out to develop student word lists. The C64 version is very slow and requires frequent disk swapping. Users must exit the word processing program and load the spell checker in order to verify the file.

**Biofeedback Microlab**
Supplier: HRM Software
Format: IIe
Evaluation Level: RECOM RSV
Curriculum Codes: SC HL
Grade Levels: S

This package provides hardware add-ons and software to monitor body functions. Data is collected and stored by the computer. Various analysis operations can be performed on the data, and several styles of presentation including graphs and data are available.

The costly package permits accurate measurement of physiological data including temperature, pulse rate and skin resistance. It is accurate enough for professional use, but relatively expensive.

**Chemical Collisions**
Supplier: COMPRESS (Div. of Queue, Inc.)
Format: IIe
Evaluation Level: RECOMMEND
Curriculum Codes: SC
Grade Levels: S

This program simulates a reaction system in which two species of molecules, A and B, are mixed together and make random collisions. Most effective use of this software would be as a whole class introduction to collision theory or as small group tutorial.

**Crosscountry Canada**
Supplier: Didatech Software
Format: IIe MSDOS
Evaluation Level: RECOM RSV
Curriculum Codes: SS PS
Grade Levels: J

This program explores Canadian geography by simulating the role of a truck driver who uses a knowledge of geography to find the shortest route between a pickup point and the destination. It is a game-type format similar to a graphic-based version of an adventure game. Student drivers must remember to rest, stop for food or gas and maintain a suitable speed. Maps are available on-screen to indicate progress across Canada. It is a limited problem-solving activity, but is restricted by the command structure and the limited list of resources at each city.

**dBASE IV 1.1**
Supplier: ASHTON-TATE
Format: MSDOS Mac
Evaluation Level: RECOMMEND
Curriculum Codes: CS
Grade Levels: S T

*dBASE IV* is a powerful relational database management system. It can store, relate, manipulate and retrieve data with great speed and efficiency. *dBASE IV* is an industry standard program which is available in stand-alone and networkable versions. Simple, menu-driven applications can be created. *dBASE* contains a structured programming language appropriate for CRS courses.

**Discovery**
Supplier: Milliken Publishing Company
Format: IIe
Evaluation Level: RECOM RSV
Curriculum Codes: SC
Grade Levels: I J

The program is concerned with solving problems and developing problem-solving skills through simulations. The class manager disk and other supplementary materials would help the teacher organize and evaluate individual student progress. These programs do not tie up the computers and develop the idea that computers are used as tools in the thinking process. This program could be used when teaching problem solving in both math and science, but especially when working with the manipulation of variables. There sometimes is too much unnecessary text and some directions are vague.

**Division, Math Tutor**
Supplier: Scholastic-TAB Publications Ltd.
Format: IIe
Evaluation Level: RECOM RSV
Curriculum Codes: MA
Grade Levels: E I

The program provides step-by-step instruction and repetition of basic arithmetic skills. The program

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*Curriculum Codes:*
*BE Business Education*
*CE Career Education*
*CS Computer Science*
*EC Early Childhood*
*FS Family Studies*
*HL Health*
*IT Industrial Arts Technology Education*
*LA Language Arts*
*MA Mathematics*
*MI Miscellaneous*
*MU Music*
*NU Nutrition*
*PE Physical Ed.*
*PS Problem Solving*
*SC Science*
*SE Special Ed.*
*SL Second Language*
*SS Social Studies*
*UT Utility*

is a good supplement for a special education, resource or regular classroom use. Some students found the directions difficult to follow and needed teacher assistance initially. Program contains some recordkeeping and placement tests, but placement tests merely assign a starting level and do not provide feedback on specific competence.

**DrawPerfect 1.1**
Supplier: WordPerfect Corporation
Format: MSDOS
Evaluation Level: RECOM RSV
Curriculum Codes: BE
Grade Levels: S

*DrawPerfect* includes a variety of features common to powerful paint programs such as rotate, move and scale. The graphics can easily be inserted into a *WordPerfect 5.1* document. Printing can either be done in black and white or in color with a suitable printer.

A flexible paint program which co-exists with *WordPerfect 5.1*. It is easy to prepare custom graphics and import into a word document. VGA monitor recommended. Mouse required.

**Easy CAD 1.08**
Supplier: Evolution Computing
Format: MSDOS
Evaluation Level: RECOMMEND
Curriculum Codes: IT UT
Grade Levels: S

The program is relevant to the senior high industrial arts program especially the graphic communication, electricity/electronics and the construction and communication technology courses.

*EasyCAD* is an excellent introduction to any CAD instruction. It uses similar commands and operates in a similar fashion as more sophisticated *AutoCAD*. The program is conveniently designed and the graphics are appropriate to the topic at hand. The *Easy CAD* drawing screen features useful items such as a Menu Bar, Large Full-Screen Crossbars and a Prompt Line. Dialog Boxes are also a valuable feature of the program. An exceptional feature of the program is the dimensioning capability which is simple, fast and effective.

**Jam Session**
Supplier: Broderbund
Format: Mac
Evaluation Level: RECOMMEND
Curriculum Codes: MU
Grade Levels: J S

This is a music program for the Macintosh which consists of three diskettes. A hard disk drive is recommended. The program consists of two parts. "Jam Session Synthesizer" simulates a small electronic keyboard which allows users to play single note tunes and to select a variety of instruments, rhythm patterns and special effects. "Studio Session" is the music-composing component of the program which permits editing of existing songs or composing of new material.

The program is easy to use and students move through parts of the program using a mouse. The instruction booklet is well-written. An external amplifier and hard disk drive are recommended. The program is most useful to older students, although it is appropriate for guided use by younger students (grades 5-9).

**King's Rule**
Supplier: Sunburst Communications
Format: IIe C64 PCDOS T1000
Evaluation Level: RECOM RSV
Curriculum Codes: MA
Grade Levels: I J

Players try to discover a numeric rule in a dungeon and dragon game format. The program includes a work area in which to test their hypotheses. The package includes a thorough teacher's manual.

The game format used in this drill and practice program proves motivating for the intended audience and is effective in developing students' critical thinking skills. The ability to enter the sequence at any point, coupled with the teacher provision of setting the difficulty level, enables this program to be used at a variety of learning levels.

**Listen 2.1**
Supplier: Resonate
Format: Mac
Evaluation Level: RECOM RSV
Curriculum Codes: MU
Grade Levels: I J

This program is designed to teach and drill ear training. Users can select difficulty level and can design exercises and drills at any level of difficulty and complexity.

The program is MIDI compatible and covers intervals, chord types and melodic dictations. A graphic display of the keyboard is highlighted to indicate which note is being played. Weaknesses include the lack of record keeping options and lack of option to input own melodies. It is easy to throw off the counting/scoring sequence by reacting too quickly with the cursor. Program is suited to reinforcement of previous instruction.

**MathType**
Supplier: Design Science Inc.
Format: Mac
Evaluation Level: RECOMMEND
Curriculum Codes: UT BE
Grade Levels: S

This utility for the Macintosh allows the user to enter and edit complex mathematical formulas. Installed as a desktop accessory with "symbol fonts," the user simply clicks in the "apple" to activate it. Once created, the formulas can be transferred to a word processing document using "cut and paste." In a similar way, formulas can be recalled for later editing.

**Microphone II**
Supplier: FRANICK Computer Products Inc.
Format: Mac
Evaluation Level: RECOMMEND
Curriculum Codes: UT
Grade Levels: S T

*Microphone II* is a communications program for the Macintosh which emulates common terminal configurations. This is an easy-to-use communications program which uses a combination of a mouse and pull-down menus to control the program. It is easy to set terminal configurations. Automatic log-on scripts can be created by having the program memorize commands typed by the user and responses from the host computer. Includes an option to upload and download foreign language characters which can easily be customized with the use of the character sets modify features.

**Microsoft Excel**
Supplier: Microsoft Canada Inc.
Format: Mac
Evaluation Level: RECOMMEND
Curriculum Codes: UT BE
Grade Levels: S

*Microsoft Excel* contains a complete sample spreadsheet with business graphics and databases. It can be used as an electronic spreadsheet and a database manager. This easy-to-use electronic spreadsheet package can share data with *Word* using "switcher" which is included in the package. *Excel* is an excellent spreadsheet, but an inferior database manager. Formulas are easily constructed using pull-down menus and a variety of graphs (pie, line, bar) can be displayed on the screen, printed or saved to disk.

**Microsoft Word 4.0**
Supplier: Microsoft Canada Inc.
Format: Mac
Evaluation Level: RECOMMEND
Curriculum Codes: UT BE
Grade Levels: S

This word processing program uses a combination of a mouse and pull-down menus to present a user-friendly working environment. Users can define their own styles or formats and preview a text before printing. Fonts and other text formatting commands can be added to the pull-down menus.

*Word* is a powerful word processing program for the Macintosh which can import text and graphics, present text in snaking columns or side-by-side tables and includes a screen preview feature. Text is displayed in a "WYSIWYG" format. The package includes a spell checker and thesaurus. Most program commands can be accessed using the mouse or command keys.

**Mousetalk (ASCII Express)**
Supplier: Unison World Inc
Format: IIe
Evaluation Level: RECOMMEND
Curriculum Codes: UT
Grade Levels: J S T

This communications program for Apple microcomputers works with either an IIe using a super serial card and external modem or an IIgs using the communications port. It uses a combination of a mouse and pull-down menus.

Most functions may be accomplished using open-apple and closed-apple keys on a computer without a mouse. Up to 20 MACRO instructions can be programmed and assigned to equivalent keys on the keyboard.

**Multiplication, Math Tutor**
Supplier: Scholastic-TAB Publications Ltd.
Format: IIe
Evaluation Level: RECOM RSV
Curriculum Codes: MA
Grade Levels: E I

The program provides step-by-step instruction and repetition of basic arithmetic skills. The program is a good supplement for special education, resource or regular classroom use. Some students found the directions difficult to follow and needed teacher assistance initially. Program contains some recordkeeping and placement tests, but placement tests merely assign a starting level and do not provide feedback on specific competence.

**Muppet Slate**
Supplier: Sunburst Communications
Format: IIe
Evaluation Level: RECOM RSV
Curriculum Codes: SE
Grade Levels: E

This is a word and picture processor which allows young children to flip through an alphabet picture book to choose pictures that will illustrate their stories or for Rebus writing. The program is used with the "Muppet Keyboard."

This software package is excellent for early childhood and primary level. It's unique because it has a menu for choosing a border to "Fill in" a page so that the child's work would not be lost in a page, when they can only print a sentence or two. As well, the program has built-in graphics to illustrate some of their writing, or to make a story. The print is very large and the font simple, and it is in lower and upper case.

**Muppets on Stage**
Supplier: Sunburst Communications
Format: IIe C64 PCDOS
Evaluation Level: RECOM RSV
Curriculum Codes: SE
Grade Levels: E

*Muppets on Stage* contains three different stages Discovery — designed to have children explore the keyboard; Letters — where children are presented with lower and upper-case letters to practice on the keyboard; and Numbers — where children must correctly identify the number of pictures shown on the screen. They are presented with several levels of difficulty.

The program deals with material that many children master in preschool years (letter and number recognition, counting, etc.) It may be useful for small numbers who require additional practice.

**PrintMaster**
Supplier: Unison World Inc
Format: C64 IIe MSDOS
Evaluation Level: RECOMMEND
Curriculum Codes: UT
Grade Levels: E I J S

This program is similar to *Print Shop* with the addition of more border styles, and options for printing calendars and memos. The package contains a simple user's manual, but clear directions are available from menus on the computer screen.

This is an easy-to-use program which permits inexperienced computer users to generate banners, greeting cards, posters and calendars which contain a mixture of text and pictures. Pictures and font styles are contained on the program diskettes. The desired product can be previewed on the screen prior to printing on paper.

**Quick Card**
Supplier: Follett Software Company
Format: IIe MSDOS
Evaluation Level: RECOMMEND
Curriculum Codes: UT
Grade Levels: T

The program allows for flexibility in printed output of library cards. This is a dedicated database program. It adhers strictly to AACR2 for punctuation and form, writes the record to disk, and allows you to print single cards or a series and/or labels. On creating a card set you may choose either Dewey or LC classification schemes. This is a useful package for a school library.

**Ready, Set, Go 3.0**
Supplier: Letraset Canada Ltd.
Format: Mac
Evaluation Level: RECOMMEND
Curriculum Codes: UT
Grade Levels: S

*Ready, Set, Go* is a powerful desktop publishing program which offers "what you see is what you get" design and layout. It can import text and graphics and automatically links text pages. The user can design layout for facing pages. The program also includes a 60 000 word spelling checker for English and French vocabulary.

This powerful program has been used to layout the elementary computer guide. It deals effectively with insertion of multipage text. The program has the ability to adjust kerning, leading and justification of type. It also flows text around graphics. Checking spelling or changing text character is limited to one text block (and linked sections) at a time. (See also *PageMaker*.)

**Say kNOw**
Supplier: Orange Juice Software Systems
Format: IIe
Evaluation Level: RECOM RSV
Curriculum Codes: HL FS
Grade Levels: J

The overall goal of *Say kNOw* is to apply knowledge regarding need fulfillment, communication styles, and self-worth to healthy decision-making.

The program is useful as a teacher support for sections of the PDR program where students examine themselves in relation to communication styles. The content and style of Part 3 could be enhanced by personalizing it. Also, some questions are vague and require a pat answer.

**School Speller, Magic Slate II**
Supplier: Sunburst Communications
Format: IIe
Evaluation Level: RECOM RSV
Curriculum Codes: LA
Grade Levels: J

The *School Speller for Magic Slate II* is a spell-checker and a word data collector. It is available in separate packages to match 40-column to 80-column versions of *Magic Slate*. By loading the files, spelling can be checked without exiting *Magic Slate II*. Extra utilities are available to print out text with errors marked and word list created.

**Sensible Grammar**
Supplier: Sensible Software Inc.
Format: IIe
Evaluation Level: RECOM RSV
Curriculum Codes: UT
Grade Levels: S

A utility program which proofreads PRODOS word processing files to identify potential errors in grammar and word usage. The program is available in 3.5" and 5.25" disk formats. Users can customize the program diskette by adding words and phrases to check. Errors can be marked in the file to be corrected later using the word processing program. A list of errors can be printed on paper.

Like *Sensible Speller*, this program must be loaded separately from the word processing program used to create text files. This is inconvenient unless the program is available on a "surplus" computer which students can access as needed. The program highlights potential errors in punctuation, grammar and word usage. Suggestions are available to replace unsuitable phrases and words.

**Subtraction, Math Tutor**
Supplier: Scholastic-TAB Publications Ltd.
Format: IIe
Evaluation Level: RECOM RSV
Curriculum Codes: MA
Grade Levels: E I

The program provides step-by-step instruction and repetition of basic arithmethic skills. The program is a good supplement for special education, resource or regular classroom use. Some students found the directions difficult to follow and needed teacher assistance initially. Program contains some recordkeeping and placement tests, but placement tests merely assign a starting level and do not provide feedback on specific competence.

**Timeout Graph**
Supplier: Beagle Bros Micro Software Inc.
Format: IIe
Evaluation Level: RECOM RSV
Curriculum Codes: UT
Grade Levels: J S T V

*Timeout Graph* is an add-on product to Appleworks and can create a wide variety of business charts and professional graphs from spreadsheet and database data. Because *Timeout Graph* is integrated with *AppleWorks*, you can quickly graph spreadsheets. Once created, a graph can be printed in a variety of sizes on most dot matrix printers, directly from inside *AppleWorks*.

The graphics in the program are clear and the freedom within the program is good. It is easiest to install on a 3.5" disk version of *AppleWorks*. Using the 5.25" version requires frequent disk swapping during the graphing process. Graphing is included within current *Appleworks* (version 3.0) making this option redundant.

**Timeout Quickspell**
Supplier: Beagle Bros Micro Software Inc
Format: IIe
Evaluation Level: RECOM RSV
Curriculum Codes: UT
Grade Levels: J S

*Timeout Quickspell* is part of the *Timeout Appleworks* enhancement series. All the products in this series work inside of *Appleworks* and are easily selected from a single menu. *Quickspell* is a spelling checker and corrector that allows you to quickly and easily correct spelling and double-word errors in your *Appleworks* word processor documents. The words are checked against an 80 000 word main dictionary and a custom dictionary of unlimited size. Corrections are made by selecting unknown words from a list or by correcting them as they appear in the word processor document. *AppleWorks 3.0* includes a spell checker.

**Ultra Key**
Supplier: Scholastic-TAB Publications Ltd.
Format: IIe Mac MSDOS
Evaluation Level: RECOMMEND
Curriculum Codes: UT
Grade Levels: I J S

*Ultra Key* teaches basic keyboarding by touch. All keys, including number keys and many commonly used symbol keys, are learned through the use of this program. To maximize learning, the program illustrates every finger action and provides audio feedback as keys are struck.

## Evaluations in Progress

**Advanced Genetics, Science Keyword Series**
Supplier: Focus Media Inc.
Format: IIe
Evaluation Level: ACCEPT 1ST
Curriculum Codes: SC
Grade Levels: S

*Advanced Genetics* is a series of computer-simulated experiments designed to supplement laboratory work in beginning college and advanced placement genetic courses. The program is divided into ten units, each of which adds new genetic concepts to those already covered in the preceding units. Experiments can be done with organisms in which the relationship between genotypes and phenotypes is already known or you can test yourself by solving problems that involve organisms in which the relationship is unknown.

**Algernon**
Supplier: Sunburst Communications
Format: IIe C64 MSDOS T1000
Evaluation Level: AT INDEPTH
Curriculum Codes: PS
Grade Levels: I

This is a program for developing elementary problem solving and programming logic. Students write simple programs in LOGO-like commands which tell Algernon, a mouse, how to find the cheese.

**Atomic Physics, General Physics Series**
Supplier: Cross Educational Software
Format: MSDOS
Evaluation Level: ACCEPT 1ST
Curriculum Codes: SC
Grade Levels: S

This program teaches the structure of atoms and the causes of radioactive decay. The program is recommended for use in the grade twelve physics course as part of the section "Particle Physics." It provides an excellent visual display of the atom along with the process of radioactive decay and can be used for remediation and as an extension of concepts discussed in the classroom.

**Auxiliary View Drawings — Engineering Drawing**
Supplier: Hearlihy & Co.
Format: IIe
Evaluation Level: AT INDEPTH
Curriculum Codes: IT
Grade Levels: S

The program deals with construction and practice exercises for auxiliary view drawings. The principles of auxiliary views relate to the advanced area of the drafting program; and therefore, the program is more appropriate to the senior high school level of the industrial arts program.

**Bank Street Storybook**
Supplier: GLC Silver Burdett
Format: IIe C64
Evaluation Level: AT INDEPTH
Curriculum Codes: LA UT
Grade Levels: I

The *Bank Street Storybook* is a tool for creative writing and drawing. Students are the authors, illustrators and animators of the stories they develop with the program.

**Basic Graphic Principles, Engineering Drawing 100**
Supplier: Hearlihy & Co.
Format: IIe
Evaluation Level: AT INDEPTH
Curriculum Codes: IT
Grade Levels: J S

The program introduces basic principles of drawing. The program could be used in teaching of basic drafting concepts. It is appropriate for both the introductory and exploratory levels of the industrial arts program.

**Be A Writer, Magic Slate**
Supplier: Sunburst Communications
Format: IIe
Evaluation Level: AT INDEPTH
Curriculum Codes: LA
Grade Levels: E I

*Be a Writer* blends traditional language arts objectives with imaginative writing exercises to introduce students to word processing. Students participate in a unique book-building venture in which they explore a wide range of composition activities and word processing functions, using *Magic Slate* word processing package.

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*Curriculum Codes:*
*BE Business Education*
*HL Health*
*MI Miscellaneous*
*SC Science*
*CE Career Education*
*IT Industrial Arts Technology Education*
*MU Music*
*SE Special Ed.*
*CS Computer Science*
*NU Nutrition*
*SL Second Language*
*EC Early Childhood*
*LA Language Arts*
*PE Physical Ed.*
*SS Social Studies*
*FS Family Studies*
*MA Mathematics*
*PS Problem Solving*
*UT Utility*

**Biosolve 2 — Infectious Disease**
Supplier: D.C. Heath and Company
Format: IIe
Evaluation Level: AT INDEPTH
Curriculum Codes: HL SC
Grade Levels: S

The primary objective of the program is to encourage students to use deductive reasoning in diagnosing a medical problem. Excellent program for students to solve medical problems deductively. Students are required to analyse symptoms, interpret data, plan activities sequentially and deal with a variety of variables.

**Biosolve 3 — Toxicology**
Supplier: D.C. Heath and Company
Format: IIe
Evaluation Level: AT INDEPTH
Curriculum Codes: HL SC
Grade Levels: S

*Toxicology* creates simulated human biology problems which students must diagnose using deductive reasoning. This provides student interaction for problem solving situations. Conclusions and solutions must be drawn by deductive reasoning of all the clues discovered while researching the situation. *Toxicology* is user-friendly and provides two levels of complexity.

**Building Perspective**
Supplier: Sunburst Communications
Format: IIe C64 MSDOS T1000
Evaluation Level: AT INDEPTH
Curriculum Codes: PS MA
Grade Levels: J

By observing a pattern in a horizontal plane, students must visualize a three-dimensional pattern. It gives practice in visual thinking, analysing a problem and predicting an outcome.

**Bumble Games**
Supplier: Learning Company, The
Format: IIe MSDOS
Evaluation Level: AT INDEPTH
Curriculum Codes: MA
Grade Levels: E I

The program contains six games which introduce the use of number pairs to name positions in an array and points on a grid. Games include "Find Your Number," "Find the Bumble," "Butterfly Net," "Visit from Space," "Tic Tac Toe" and "Bumble Dot." The first four games are suitable for use with young children. The last two games use x,y axis and are more suited to older children.

**CADKEY 1**
Supplier: Hearlihy & Co.
Format: MSDOS
Evaluation Level: AT INDEPTH
Curriculum Codes: IT
Grade Levels: S

*CADKEY 1* is a fairly inexpensive computer-aided-drafting program which facilitates drawing in both two- and three-dimensions. The program utilizes a convenient menu-driven interface as well as a screen which constantly provides the status of the program's major elements.

Plotting in English and metric units is available and the program includes a user's guide which comprises a step-by-step tutorial.

**Canada Fitness Award**
Supplier: CAHPER Canadian Association of Health,
Physical Education & Recreation
Format: IIe
Evaluation Level: ACCEPT 1ST
Curriculum Codes: PE
Grade Levels: T

This is a special-purpose database program which is designed to collect data on student achievement of Canada Fitness level.

**Cells, Structure & Functions**
Supplier: Gage Educational Publishing Company
Format: IIe
Evaluation Level: ACCEPT 1ST
Curriculum Codes: SC
Grade Levels: J S

Students learn to identify seven organelles on a graphic of an animal cell. The function of cell structure, water movement and concentration gradients, diffusion and active transport are also explored.

After an exploratory laboratory activity and problem-solving session, the program could be used as a way of solidifying the concepts and learning content. The program emphasizes rote memory. Review questions lack imagination and have a limited scope for helping students who do poorly.

**CHAOS Plus**
Supplier: EduTech
Format: IIe

Evaluation Level: ACCEPT 1ST
Curriculum Codes: SC MA
Grade Levels: S

*CHAOS Plus* is an interactive introduction to chaos, fractuals and cellular automata. This program deals with a new field in science and math.

### Code Quest

Supplier: Sunburst Communications
Format: PCDOS T1000 IIe C64
Evaluation Level: ACCEPT 1ST
Curriculum Codes: MA PS
Grade Levels: I

Students try to decode six different clues in order to identify the mystery object in each game. Clues are presented as scrambled letters, pictures, and whole words. Codes may be solved by substituting a letter (as in a cryptogram), by constructing letters in a maze, or determining which letters are represented by a sequence of numbers.

The program provides an exciting challenge for high, average and gifted students in grades four to six. There is no preset sequence, and students select the type of clue desired from a menu. Each problem requires extensive thinking. Limited helpful clues are available. Students can enter their own mystery when they have successfully decoded the one presented randomly to them.

### Collisions on an Air Track

Supplier: Cambridge Development Laboratory, Inc.
Format: IIe
Evaluation Level: AT INDEPTH
Curriculum Codes: SC
Grade Levels: S

The program would be beneficial to anyone studying conservation of momentum or energy. It simulates collisions of two objects moving on a horizontal, frictionless surface (an air track).

Good for simulated lab work regarding conservation laws of momentum or for remediation. Program does try to accomplish too much; and therefore, it tends to create scenarios which may not be interesting to students.

### Color Keys

Supplier: Sunburst Communications
Format: IIe
Evaluation Level: ACCEPT 1ST
Curriculum Codes: PS
Grade Levels: I

This program provides practice in visual discrimination, seeking and transferring information, pattern recognition and mental manipulation of color combinations in order to produce a color pattern according to rules established by a key. There are 41 levels of difficulty. Requires a color monitor.

### Computereyes

Supplier: Digital Vision, Inc.
Format: IIe
Evaluation Level: ACCEPT 1ST
Curriculum Codes: UT IT
Grade Levels: J S

Software package which economically captures real-world images into the graphics displays of Apple II computers using a video camera. Application for graphic arts, desktop publishing. Needs monochrome video camera. Each primary color must be scanned very slowly and separately. Any camera motion will result in a blurred image.

### Conservation Laws

Supplier: Cross Educational Software
Format: MSDOS
Evaluation Level: ACCEPT 1ST
Curriculum Codes: SC
Grade Levels: S

From the "Computer Physics Series," this program covers the following topics: Conservation of Momentum, One and Two Dimensional Collisions, Energy Conservation, Conservative Forces, Non-Conservative Forces, and Energy of a Bouncing Ball. Tutorial sessions for review and reinforcement.

### Crossword Magic (Revised)

Supplier: Mindscape, Inc.
Format: IIe C64
Evaluation Level: ACCEPT 1ST
Curriculum Codes: UT LA
Grade Levels: J

*Crossword Magic* turns the crossword puzzle into a flexible tool for teaching. Easily-accessed, on-screen options make it simple to create, edit, transfer, print, and play puzzles. This provides an easy way to create and play crossword puzzles. Puzzles can be printed on paper or solved on the computer screen.

### Deluxe Music Construction Set

Supplier: Electronic Arts
Format: IIe

*Curriculum Codes:*

*BE Business Education* *CE Career Education* *CS Computer Science* *EC Early Childhood* *FS Family Studies*
*HL Health* *IT Industrial Arts Technology Education* *LA Language Arts* *MA Mathematics*
*MI Miscellaneous* *MU Music* *NU Nutrition* *PE Physical Ed.* *PS Problem Solving*
*SC Science* *SE Special Ed.* *SL Second Language* *SS Social Studies* *UT Utility*

Evaluation Level: AT INDEPTH
Curriculum Codes: MU
Grade Levels: I J S T

This software is easy to use and produces excellent notation for use as classroom material. It would no doubt also be valuable in a program equipped with additional electronic instruments, geared toward student composition.

**Desert, Explore-A-Science**
Supplier: D.C. Heath and Company
Format: IIe
Evaluation Level: ACCEPT 1ST
Curriculum Codes: SC
Grade Levels: E I

*Desert* is an educational program that allows you to explore the wonders of the scientific world while discovering reading, writing, and their own imagination. Good balance between concepts and student manipulation and interaction with the program. Emphasis on group work, research skills, manipulation and production.

**Design Your Own Home — Architecture**
Supplier: Abracadata
Format: MSDOS
Evaluation Level: ACCEPT 1ST
Curriculum Codes: IT
Grade Levels: J S

*Design Your Own Home: Architecture* is a flexible tool for easily creating floor plans, graphs, charts, architectural drawings, and more. Features include grid snap, defined scales, repeater tool, 2 sizes of vertical & horizontal text, pre-drawn architectural shapes, and split screening.

This program is a very user-friendly introduction to the basics of house design and architectural drafting and design.

**Desk Top Library, Library Edition**
Supplier: Scholastic-TAB Publications Ltd.
Format: IIe
Evaluation Level: AT INDEPTH
Curriculum Codes: UT
Grade Levels: J S T

*Desk Top Library (Library Edition)* helps organize a school library and/or classroom collection of materials using accepted library practices. The module for use by students is difficult and requires much teacher help. If certain sequences are not followed, the program will not give adequate help.

**Dimension Techniques, Engineering Drawing 100**
Supplier: Hearlihy & Co.
Format: IIe
Evaluation Level: AT INDEPTH
Curriculum Codes: IT
Grade Levels: J S

Dimensioning in both customary and metric values are covered in this program. Understanding the correct methods of dimensioning is a key aspect of basic drafting. This program does a good job of inculcating these important methods and techniques.

**Dinner Party**
Supplier: Orange Juice Software Systems
Format: IIe
Evaluation Level: ACCEPT 1ST
Curriculum Codes: HL FS
Grade Levels: J S

The *Dinner Party* Simulation is a challenging exercise requiring co-operation, critical thinking and decision making. A good exercise in a fun format. The program is useful for Family Studies/Independent Living courses.

**Discover the World**
Supplier: Hartley Courseware Inc.
Format: IIe
Evaluation Level: ACCEPT 1ST
Curriculum Codes: SS
Grade Levels: J

Through simulation of exploration and trading, the student must make informed decisions in order to complete this simulation, correctly answer questions regarding the history of the area, and define and implement a strategy for exploration.

The program needs a great deal of instruction and practice to operate and become efficient, but the content seems applicable for grade 7 history.

**DiscoverCAD II**
Supplier: Hearlihy & Co.
Format: IIe
Evaluation Level: AT INDEPTH
Curriculum Codes: IT
Grade Levels: J S

*Discover CAD* is designed for any IIe or IIgs with 128 K, two disk drives and the Apple mouse. It offers Macintosh-like pull-down menus. The instructional format follows the casual computer-aided drafting instructional model format, i.e., using the keyboard and mouse, doing a simple drawing, and related instructional items for modifying, editing, adding text and dimensions and plotting.

### Discovery Lab

Supplier: Minnesota Ed. Computing Consortium
Format: IIe
Evaluation Level: AT INDEPTH
Curriculum Codes: SC
Grade Levels: J

*Discovery Lab* is designed to introduce students to scientific processes— specifically, observations, experimental design and hypothesis testing. The package contains three separate labs of differing difficulty. Good summary of controlled and manipulated variables with detailed questions on the control of variables.

### Economics — What, How & For Whom?

Supplier: Focus Media Inc.
Format: IIe
Evaluation Level: ACCEPT 1ST
Curriculum Codes: SS
Grade Levels: S

The teacher's manual provides an outline of the program user's guide, general unit plan, glossary, review and test questions. The program can be used in whole or in part with a class group or individually. Key economic concepts are developed through the use of explanations, models and graphs.

### Enlist Micros Workshop Unit

Supplier: EME Corporation
Format: IIe
Evaluation Level: ACCEPT 1ST
Curriculum Codes: SC
Grade Levels: T

This workshop unit includes software, VHS videotape and 20 resource manuals. It is a minicourse for science teachers on effective classroom use of computers to enhance teaching and learning especially lab interfacing, software utilities and the use of science courseware. Excellent in-servicing program integrated into a comprehensive and proven implementation model. Actively engages teachers and administrators in using microcomputers in their classrooms and districts.

### Foods — The Digestive System

Supplier: Orange Juice Software Systems
Format: IIe
Evaluation Level: ACCEPT 1ST
Curriculum Codes: HL FS
Grade Levels: J S

The program enables the user to define digestion, label parts of the digestive system on an illustration, list the parts of the alimentary canal, describe the physical appearance and function of each part of the digestive system, identify the digestive juices secreted by each part of the digestive system, including the enzymes these juices contain, and define the role of each enzyme in the system. It might be used for review or an introduction to new material. There is a game to reinforce the learning.

### From the Beginning...Contraception

Supplier: Orange Juice Software Systems
Format: IIe
Evaluation Level: ACCEPT 1ST
Curriculum Codes: HL FS
Grade Levels: J S

The Contraception package is presented in two disks: Disk 1 — introduces methods of contraception; Disk 2 — discusses other various methods of contraception and the future of contraception. This presents a good review of current information. There is a review quiz after each section. It would be useful for individual review, follow-up lesson, and reinforcement of ideas.

### From the Beginning...Menstruation

Supplier: Orange Juice Software Systems
Format: IIe
Evaluation Level: ACCEPT 1ST
Curriculum Codes: HL
Grade Levels: I J

This program's goal is to develop an understanding of the process of menstruation and related personal care. An independent learning or reinforcement program.

### From the Beginning...Reproduction System and Conception

Supplier: Orange Juice Software Systems
Format: IIe
Evaluation Level: ACCEPT 1ST
Curriculum Codes: HL FS
Grade Levels: J S

This package introduces the male and female reproductive systems and facts about conception.

**Generic CADD 1.1, Level 1**
Supplier: Generic
Format: Mac
Evaluation Level: AT INDEPTH
Curriculum Codes: IT
Grade Levels: S T V

This is a computer-aided design and drafting program that will allow creation of floor plans, charts and product drawings on a personal computer.

Level 1 is a full-featured, two-dimensional design and drafting package. Many of the same conventions used in the MSDOS version of Generic CADD are utilized such as the two-character command structure. Standard Macintosh "cut and paste" commands are used as well. Complex drawings take a long time to be "drawn" on the computer screen, and there is no display to indicate that users must wait. An optional Math Co-processor should be installed in the computer to speed up drawing. Text choices are very limited, and there is no choice of line width.

**Geo Construction of Lines, Arcs, Engineering Drawing 100**
Supplier: Hearlihy & Co.
Format: IIe
Evaluation Level: AT INDEPTH
Curriculum Codes: IT
Grade Levels: J S

The content of this program contains types of lines, bisecting lines, dividing a line into equal parts, line through a point and tangent to an arc, arcs tangent to perpendicular lines, arcs tangent to an arc and a line, lines tangent to an arc and arc tangent to two arcs.

The program could be very useful to aid in the teaching of basic drafting concepts as well as a friendly introduction to the computers.

**Geo Construction Using Figures, Engineering Drawing 100**
Supplier: Hearlihy & Co.
Format: IIe
Evaluation Level: AT INDEPTH
Curriculum Codes: IT
Grade Levels: J

The program covers basic geometrical construction figures which is part of the junior high graphics communications course. The content covers basic geometrical construction which is an important feature of industrial arts introductory drafting courses.

**Geo World**
Supplier: Tom Snyder Productions
Format: IIe
Evaluation Level: ACCEPT 1ST
Curriculum Codes: SS
Grade Levels: JS

*GeoWorld* provides a new approach to using databases in the classroom. It combines an accurate database of 15 natural resources with an engaging simulation of geological exploration. Your students become researchers and geologists, searching the world for resources. They perform a variety of geological tests and make mining decisions. Through this they learn of the resources in our interdependent world.

This program provides students with the ability to seek out the availability of natural resources in various parts of the world. The program provides for problem solving, learning of scientific information relating to the natural resources and the types of rock in which they are found. It involves searching out data, comparing information and writing reports. It is a scientific or physical geography study. It only contains major areas of mineral deposits and not all areas.

**Geometric preSupposer, Geometric Supposer**
Supplier: Sunburst Communications
Format: IIe PCDOS
Evaluation Level: AT INDEPTH
Curriculum Codes: MA
Grade Levels: J S

Part of the *Geometric Supposer* series, the *preSupposer* allows the student to explore all figures on a plane. Various compass and straight edge constructions can be performed and measurements taken.

**Geometric Supposer — Circles**
Supplier: Sunburst Communications
Format: IIe PCDOS Mac
Evaluation Level: AT INDEPTH
Curriculum Codes: MA
Grade Levels: S

This is a graphics program for exploring the geometry of a circle.

**Grab A Byte**
Supplier: National Dairy Council
Format: IIe
Evaluation Level: ACCEPT 1ST

Curriculum Codes: NU
Grade Levels: J

A program which analyzes the nutritional content of foods. *Grab a Byte* can be used to reinforce or review nutrient knowledge. Reinforcement is provided for correct answers, and corrections are provided for wrong answers.

**Grammatik III**
Supplier: Reference Software
Format: MSDOS
Evaluation Level: ACCEPT 1ST
Curriculum Codes: BE UT
Grade Levels: S

*Grammatik III* electronically proofreads documents created with a word processor. It catches punctuation errors, questions usage, and analyses readability according to readability formulas. It can find true grammar errors, including subject-verb agreement problems, incorrect word usage, and improper pronoun usage.

Grammatik III should be installed on a hard disk. The program may help students understand and correct common errors in English language. It supports a variety of word processing formats. It is a stand-alone product, and a word processing program must be exited before checking a file with *Grammatik*. It is slow, but might be installed on one dedicated workstation where students could check their work.

**Graphic Expander, Vol. 1**
Supplier: Springboard Software, Inc.
Format: C64 IIe MSDOS
Evaluation Level: ACCEPT 1ST
Curriculum Codes: UT
Grade Levels: J S

The *Graphic Expander* is an add-on graphics program to the *Print Shop* that allows users to dramatically increase and edit graphics for the *Print Shop* and *Newsroom*.

**Gravity, General Physics Series**
Supplier: Cross Educational Software
Format: MSDOS
Evaluation Level: ACCEPT 1ST
Curriculum Codes: SC
Grade Levels: S

This program allows users to set up situations in astronomy. The mass, speed and other characteristics of objects can be changed at any time.

The program is highly flexible in providing a large number of orbital interactions with a high degree of user interactions. Simulation of orbital paths is of only medium-grade resolution.

**Haber Tech**
Supplier: COMPRESS (Div. of Queue, Inc.)
Format: IIe
Evaluation Level: ACCEPT 1ST
Curriculum Codes: SC
Grade Levels: S

This program gives the opportunity to explore a chemical manufacturing process and experience what it is like to be the operating manager of an industrial manufacturing plant that produces ammonia. Facilitates the teaching of pressure, volume, rates of reactions and how ammonia is produced. Easy to use. Graphics and language is easily used by students.

**Halo Island, Mystery on**
Supplier: Key Porter Software
Format: IIe
Evaluation Level: ACCEPT 1ST
Curriculum Codes: LA
Grade Levels: I

A mystery story with a variety of routes and endings, the program is similar to adventure games which branch in response to decisions by the reader.

**Health Risk Appraisal**
Supplier: HRM Software
Format: IIe
Evaluation Level: AT INDEPTH
Curriculum Codes: HL PE
Grade Levels: J S

The program is a health-risk assessment and education package that can be used to profile individual general health and offer suggestions to improve life span profile. If a printer is connected, students can obtain a paper copy of their assessment.

This package provides information at the end of the program which enables the user to set goals and objectives to improve health and lifestyle. In the senior high physical education program, this software could be used by students to develop awareness of fitness levels, use of drugs, and personal safety in regard to motor vehicle use.

**Hidden Agenda**
Supplier: Scholastic

Format: MSDOS
Evaluation Level: ACCEPT 1ST
Curriculum Codes: SS
Grade Levels: S

In *Hidden Agenda* you must take control of a nation which has just overthrown their dictator. You will have to deal with strong characters with advice on what they think you should do. You will not be able to please everyone but you must make choices.

*Hidden Agenda* stimulates discussions on social and military factors in a Central American context. Requires CGA monitor or better. For CGA, picture is displayed in monochrome.

**HoltMath 7**
Supplier: Holt, Rinehart & Winston of Canada, Ltd.
Format: IIe
Evaluation Level: AT INDEPTH
Curriculum Codes: MA PS
Grade Levels: J

The software package consists of 12 programs designed to support and extend the concepts taught in the *HoltMath 7* textbook. The programs provide learners with an opportunity to experience math concepts and develop competencies at several levels.

**Home Hunter**
Supplier: Orange Juice Software Systems
Format: IIe
Evaluation Level: ACCEPT 1ST
Curriculum Codes: HL FS
Grade Levels: J S

This program contains an introduction to factors to consider in choosing a home such as housing in the past, family budget, projection for the future and discusses the house versus the home.

**Human Genetic Disorders**
Supplier: HRM Software
Format: IIe
Evaluation Level: ACCEPT 1ST
Curriculum Codes: SC
Grade Levels: J S

The program explores human genetic disorders by having students infer parents' genotypes and phenotypes or obtaining pedigrees. It gives students an opportunity to explore and review genetic disorders. Statistical probabilities of pedigree lines could be better expressed so that students could develop better inferencing and problem-solving abilities.

**Individual Training for WP**
Supplier: Individual Software Inc
Format: MSDOS
Evaluation Level: ACCEPT 1ST
Curriculum Codes: BE
Grade Levels: S

This is a computer-based tutorial which introduces *WordPerfect* using practical examples. The learner can select any topics that she or he wishes to pursue. In this way depth is self-determined. Very readable and easy to use, the program provides actual practice with *WordPerfect*.

**InSight — Your Career Planning**
Supplier: Bytes of Learning
Format: IIe
Evaluation Level: AT INDEPTH
Curriculum Codes: CE
Grade Levels: J S

The program permits junior high students to explore some of the factors which influence an occupation based on "data, people, and things" as a basic classification. It could be used by any subject teacher to demonstrate the effect of taking or dropping a school subject on career choices. The object of this database is to help students with decision making and career exploration. There are 760 occupational descriptions, including level of education, related subjects and training. Printouts can be made at the end of their search to use during a counselling session.

**Mac-3D 2.1**
Supplier: Challenger Software Corporation
Format: Mac
Evaluation Level: AT INDEPTH
Curriculum Codes: IT
Grade Levels: S T

The program can be used to prepare two- and three-dimensional graphics for use in illustrations, presentations, architectural models, technical drawings and desktop publishing.

Although this is a very powerful program which allows for three-dimensional drawing, the various aspects of the program work fairly slowly and take time to complete. This would make it difficult to use if it was being shared among many students. It has substantial merit for advanced students requiring a powerful program.

**Math Blaster**
Supplier: Davidson and Assoc. Inc.

Format: IIe
Evaluation Level: AT INDEPTH
Curriculum Codes: SE MA
Grade Levels: E

This is a program designed to reinforce basic math computational skills and to help increase speed and accuracy through a game-like format. Because of timed responses, students may have difficulty achieving improved scores and may become discouraged even though they know basic computations.

### Microsoft QuickBASIC

Supplier: Microsoft Corporation
Format: MSDOS
Evaluation Level: AT INDEPTH
Curriculum Codes: CS BE
Grade Levels: S T V

*Microsoft QuickBASIC* is a programming environment that includes tools for writing, editing, running and debugging programs. These tools are integrated with a powerful version of the Basic programming language and an on-line help system that explains everything about both the environment and the language. As you enter each line, QuickBASIC checks its validity. It changes it into a form the computer can execute or specifies an error and helps you correct it.

### MultiScribe

Supplier: Scholastic-TAB Publications Ltd.
Format: IIe IIgs
Evaluation Level: AT INDEPTH
Curriculum Codes: UT
Grade Levels: J S

*Multiscribe* is a word processing program which allows the operator the options of using the keyboard or the mouse. It is a word processor which offers a variety of options much like the Macintosh.

### Multiview Drawing, Engineering Drawing 100

Supplier: Hearlihy & Co.
Format: IIe
Evaluation Level: AT INDEPTH
Curriculum Codes: IT
Grade Levels: J

The program deals with the basic principles of laying out orthographic multiview drawings including the very crucial aspect of how to correctly space the different views. Understanding orthographic multiview projection is a key element of basic drafting and is a hard concept for students to grasp. This program has the potential of making that task much easier.

### Number Quest

Supplier: Sunburst Communications
Format: IIe
Evaluation Level: AT INDEPTH
Curriculum Codes: MA
Grade Levels: I

The computer selects a number on the number line, an ordered pair on a plane or an ordered triplet in space. Students use strategies to discover the selected number(s).

### Oh Deer

Supplier: Minnesota Ed. Computing Consortium
Format: IIe
Evaluation Level: ACCEPT 1ST
Curriculum Codes: SC
Grade Levels: J S

The program provides simulations of the population dynamics of white-tail deer. Working with controlled and uncontrolled variables. It has a science/social studies theme (ecological management). This software is a good tool for promoting decision making and problem solving. Students research and/or select from a list of strategies for managing a deer herd. This ecological management program relies upon an STS curriculum format. It includes scientific analysis, technological interactions and societal influences (economics, public opinion).

### One World Countries Database

Supplier: Active Learning Systems
Format: IIe
Evaluation Level: ACCEPT 1ST
Curriculum Codes: SS
Grade Levels: S

The package is based on a computer reference file containing demographic and geographic information about the countries of the world. The program may be useful for comparison and problem-solving in global geography and history.

### Optics, General Physics Series

Supplier: Cross Educational Software
Format: MSDOS
Evaluation Level: ACCEPT 1ST

*Curriculum Codes:*

*BE Business Education*
*CE Career Education*
*CS Computer Science*
*EC Early Childhood*
*FS Family Studies*
*HL Health*
*IT Industrial Arts Technology Education*
*LA Language Arts*
*MA Mathematics*
*MI Miscellaneous*
*MU Music*
*NU Nutrition*
*PE Physical Ed.*
*PS Problem Solving*
*SC Science*
*SE Special Ed.*
*SL Second Language*
*SS Social Studies*
*UT Utility*

Curriculum Codes: SC
Grade Levels: S

This disk consists of six programs — three cover ray diagrams used in geometrical optics, the others discuss physical optics for the more advanced. Sessions present rules for ray diagrams, lens and mirror experiment, waves, diffraction, lasers and image formation. Each session is followed by a short quiz. The software provides an excellent depiction of wave interference and, to some extent, could replace an oscilloscope.

**Parent Pit, The**
Supplier: Orange Juice Software Systems
Format: IIe
Evaluation Level: ACCEPT 1ST
Curriculum Codes: HL FS
Grade Levels: J S

*The Parent Pit* simulates a parenting experience utilizing a game format which includes parenting situations. This program presents parenting situations where the user decides on the appropriate response. Whether your response is right or wrong, an explanation will be provided to show why it is the correct response. Although not required, a game to increase your points is also included.

**PFS First Publisher 3.0**
Supplier: PC Connection
Format: MSDOS
Evaluation Level: At Indepth
Curriculum Codes: IT UT
Grade Levels: J S

The software introduces students to the major elements of the desktop publishing process — design and planning, preparing text, preparing graphics, layout, adding design elements and printing publications. It is a low-cost, user-friendly program for creating newsletters, educational materials and charts, fliers, reports, procedure sheets, brochures, and other similar documents relevant to the graphic communications component of the industrial arts technology program.

**Photosynthesis & Respiration**
Supplier: Gage Educational Publishing Company
Format: IIe
Evaluation Level: ACCEPT 1ST
Curriculum Codes: SC
Grade Levels: J

Animated graphics in this program help students learn to describe the processes of photosynthesis and respiration.

**Plane View**
Supplier: Sunburst Communications
Format: IIe C64
Evaluation Level: AT INDEPTH
Curriculum Codes: MA PS
Grade Levels: I J

This math program allows the student to trace a shape on the edge of a table surface and then be able to identify it. The program may help learners become more aware of the need to examine problems from more than one point of view.

**Plato's Cave**
Supplier: Krell Software
Format: IIe C64
Evaluation Level: AT INDEPTH
Curriculum Codes: PS
Grade Levels: J S

The computer draws a square array of dots (the cave), and students discover the nature and location of objects hidden within it. Students shine a light into the cave and make deductions based on the pattern of reflection.

**Playing with Science — Temperature**
Supplier: Sunburst Communications
Format: IIe
Evaluation Level: ACCEPT 1ST
Curriculum Codes: SC
Grade Levels: I J

This program consists of a detailed teachers' manual and a simple interfacing tool to be used primarily in the science program. By plugging one to three of the enclosed temperature probes into a simple connector, the computer accurately measures temperature and can generate printed graphs or data tables for up to three probes. This program will fit into the upper elementary and junior high science program. It can save and print data in units assigned by the student. Although three temperature probes are included with the package, the Apple IIc is only capable of reading one or two. The directions to connect and use the kit are very straight forward and students can quickly use the package to conduct scientific experiments.

### Portable Woodworking Equipment

Supplier: Hearlihy & Co.
Format: MSDOS
Evaluation Level: ACCEPT 1ST
Curriculum Codes: IT
Grade Levels: S

Attractive computer graphics hold students attention while illustrating the parts of woodworking shop equipment. The text discusses safety and operations of each machine. There are quizzes on each section and all scores are saved to disk which can be viewed later by the teacher. The machines covered are the saber saw, portable circular saw, router safety and operations, portable vibrator sander, and portable electric drill.

*Portable Woodworking Equipment* is a menu-driven program which uses computer graphics to describe the parts and safe operation of five major portable woodworking tools — sabre saw, sander, electric drill, router and circular saw. Short quizzes are given after the introduction for each tool. However, a problem is encountered for those who do not have two 5.25 inch disk drives. The program only seems to run properly using this setup.

### Publish It 2.1

Supplier: Timeworks
Format: IIe (Enhanced)IIgs MSDOS
Evaluation Level: AT INDEPTH
Curriculum Codes: UT IT
Grade Levels: J S

This desktop publishing program has features similar to *Ready, Set, Go* or *Pagemaker*. Files can be imported from a variety of word processing programs. It supports a variety of printers including IIgs serial port. The 3.5" disk format for the IIgs needs a mouse! The program can input *AppleWorks* files into predesigned blocks. *Publish It* is a comprehensive type desktop publishing program that facilitates the design and layout of quality looking projects, newsletters and newspapers. The IIgs version requires a great deal of disk swapping which causes it to run slowly.

### Puzzler

Supplier: Sunburst Communications
Format: IIe C64 PCDOS T1000
Evaluation Level: ACCEPT 1ST
Curriculum Codes: LA
Grade Levels: I

The *Puzzler* is a package of stories designed to encourage students to predict outcomes. It also encourages them to use context clues to discover meanings of new words. Overhead transparency masters are included in the package.

### Rape Awareness and Prevention Exercise

Supplier: Orange Juice Software Systems
Format: IIe
Evaluation Level: ACCEPT 1ST
Curriculum Codes: HL FS
Grade Levels: J S

The program's goal is to formulate a thinking process that will assist the user in recognizing, avoiding and preventing potential rape situations, and to explore available options and alternative courses of action during and after an attack should one unavoidably occur.

### Redlights, Greenlights

Supplier: Interactive Image Technologies Inc.
Format: IIgs
Evaluation Level: ACCEPT 1ST
Curriculum Codes: HL
Grade Levels: I

The goal of *Redlights, Greenlights* is to help students in grades 3 to 8 develop the attitudes, knowledge and skills necessary to cope with the problems of everyday life and get along better with others. It is based on the belief that the presence of effective social problem-solving skills can contribute to a positive, self-confident approach to life.

### Section View Drawings, Engineering Drawing 100

Supplier: Hearlihy & Co.
Format: IIe
Evaluation Level: AT INDEPTH
Curriculum Codes: IT
Grade Levels: S

Sectional views, cutting planes, section lining, full sections, half sections, broken out sections, offset sections, revolved sections, removed sections, assembly sections and section conventions are included in this package.

Graphic presentation of drafting concepts and basic principles which are sometimes difficult to teach otherwise. No quizzes are used in this program in contrast to the others in the series, and students are expected to get the appropriate practice by utilizing the workbook.

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*Curriculum Codes:*

*BE Business Education*
*HL Health*
*MI Miscellaneous*
*SC Science*
*CE Career Education*
*IT Industrial Arts Technology Education*
*MU Music*
*SE Special Ed.*
*CS Computer Science*
*NU Nutrition*
*SL Second Language*
*EC Early Childhood*
*LA Language Arts*
*PE Physical Ed.*
*SS Social Studies*
*FS Family Studies*
*MA Mathematics*
*PS Problem Solving*
*UT Utility*

**Semantic Calculator (Sem Calc)**
Supplier: Sunburst Communications
Format: IIe
Evaluation Level: ACCEPT 1ST
Curriculum Codes: MA
Grade Levels: I J

The program allows user to perform mathematical operations on number quantities and their units of measure. Units are automatically adjusted in response to the selected mathematical operation. Students can experiment with operations such as adding five apples to four oranges. The program questions the user on conversion to common units of measurement.

**Sky Travel**
Supplier: Commodore Business Machines
Format: C64
Evaluation Level: ACCEPT 1ST
Curriculum Codes: SC
Grade Levels: J

This package is an accurate simulation of the relative movement of stars and planets. Users can select a viewing point on earth and a time forward or backward (roughly 2 000 years) and observe the sky overhead at that time. It includes simulations of eclipses and phenomena such as Halley's Comet.

**Slide Shop**
Supplier: Scholastic-TAB Publications Ltd.
Format: IIe
Evaluation Level: ACCEPT 1ST
Curriculum Codes: UT
Grade Levels: I J

*Slide Shop* is a desktop presentation program designed specifically for schools. You can create self-running lesson disks, titles for video tapes, printed handouts and automatically repeating video displays. This could be used as a novel way of book reporting. Students can create computerized presentations to show their work.

**Stress and the Young Adult**
Supplier: Administration Information Ed. Aids
Format: IIe
Evaluation Level: ACCEPT 1ST
Curriculum Codes: HL FS
Grade Levels: J S

Students interact with this program in deciding appropriate actions to take in stress-producing situations common to adolescents and young adults. This program causes students to think about stress and what it is and how to relieve it. The remedies are simple every day answers and with this program the user becomes more aware of stress.

**Success with Writing**
Supplier: Scholastic-TAB Publications Ltd.
Format: IIe
Evaluation Level: ACCEPT 1ST
Curriculum Codes: LA
Grade Levels: J

*Success with Writing* helps students with all phases of writing from generating ideas and outlines to writing and editing a final draft. It is broken down into four modules: 1) Generate ideas; 2) Organize ideas into an outline; 3) Compose your work through typing and editing; 4) Review and revise. This is a flexible writing tool. Many options are provided and students are encouraged to select the ones which best suit their writing styles.

**Super Story Tree**
Supplier: Scholastic-TAB Publications Ltd.
Format: IIe
Evaluation Level: ACCEPT 1ST
Curriculum Codes: LA UT
Grade Levels: I

*Super Story Tree* is a program for writing and reading interactive stories, reports and presentations. It allows choices which affect the way the story unfolds. Stories can include text, sound effects, music, graphics or your own designs. It also has such features as screen wipes, dissolves, flicker etc.

*Super Story Tree* allows students to create or read interactive stories that contains graphics, sounds and special effects. It provides an open-ended opportunity of choices.

**SuperPrint II**
Supplier: Scholastic-TAB Publications Ltd.
Format: IIe
Evaluation Level: ACCEPT 1ST
Curriculum Codes: UT
Grade Levels: E I J

*SuperPrint II* is an easy to use graphics printing program for making posters, signs, calendars, cards, borders, and banners. You can design great looking fliers, bulletin board displays, greeting cards, invitations, holiday decorations, stage scenery, class projects and much more.

### Survival Math
Supplier: Sunburst Communications
Format: IIe C64
Evaluation Level: ACCEPT 1ST
Curriculum Codes: MA
Grade Levels: I J

Four simulations help students apply math skills to everyday life. In "Travel Agent Contest," students plan a budget for trip. "Smart Shopper Marathon," has students making price comparisons using such aids as unit pricing and percent discounts. At "Hot Dog Stand," students run a stand at school football games, making inventory and price decisions based on many varibles. In "Foreman's Assistant," students build a playroom with a given time frame and budget.

### Talking Text Writer
Supplier: Scholastic-TAB Publications Ltd.
Format: IIe
Evaluation Level: ACCEPT 1ST
Curriculum Codes: UT SE
Grade Levels: E I

A word processing program which can be used with an Echo II speech synthesizer to read back letters, words, sentences or a whole story.

### Touchwindow
Supplier: Sunburst Communications
Format: IIe
Evaluation Level: ACCEPT 1ST
Curriculum Codes: SE
Grade Levels: E I J

This is a removable clear screen which attaches to the joystick port of a computer. The screen can be placed over a conventional monitor to simulate a touch screen or used as a flat drawing tablet when used with software which is compatible.

### Tracks, Explore-A-Science
Supplier: D.C. Heath and Company
Format: IIe
Evaluation Level: ACCEPT 1ST
Curriculum Codes: SC
Grade Levels: E I

Tracks is an educational program that allows you to explore the wonders of the scientific world while discovering reading, writing and the student's own imagination. *Tracks* allows students to explore, discover and interact with animals and their tracks. Writing is a major part of the interaction in this program with many scenes presented for diary notes.

### Type to Learn
Supplier: Sunburst Communications
Format: MSDOS T1000
Evaluation Level: Accept 1st
Curriculum Codes: LA
Grade Levels: E I J

*Type to Learn* teaches the keystrokes for the alphabet, numeral and punctuation keys by combining keyboard instruction with language arts education.

### Visualizing Algebra, The Function Analyzer
Supplier: Sunburst Communications
Format: MSDOS
Evaluation Level: ACCEPT 1ST
Curriculum Codes: MA
Grade Levels: J S

This program provides students with a flexible tool to explore functions and their graphs. It also helps students explore the relationships among symbolic expressions, graphs and tables of values. Program enables students to graph functions and explore translations, flips and stretches of the function. Very good chance to explore use of scale and family of functions. Does not include trig functions.

### Volcanoes, Earth Science
Supplier: IBM Canada Ltd.
Format: PCDOS
Evaluation Level: ACCEPT 1ST
Curriculum Code: SC
Grade Levels: S

The objectives of this package are: to observe the environment and explain the way it changes over time; explain what has happened in the past and predict what may happen; recognize how the environment processes link together the physical world processes, become better informed on environment, develop skills in interpreting diagrams, analysing data and predicting results.

### Whales, Explore-A-Science
Supplier: D.C. Heath and Company
Format: IIe
Evaluation Level: AT INDEPTH
Curriculum Codes: SC
Grade Levels: E I

Whales is an educational program that allows you to explore the wonders of scientific world while

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*Curriculum Codes:*
*BE Business Education* *CE Career Education* *CS Computer Science* *EC Early Childhood* *FS Family Studies*
*HL Health* *IT Industrial Arts Technology Education* *LA Language Arts* *MA Mathematics*
*MI Miscellaneous* *MU Music* *NU Nutrition* *PE Physical Ed.* *PS Problem Solving*
*SC Science* *SE Special Ed.* *SL Second Language* *SS Social Studies* *UT Utility*

discovering reading and writing. This is a discovery, explore and interaction program which presents information on whales. Students must read, record, report and manipulate graphics and text elements. *Whales* provides graphics with some animation.

**What Did You Eat Yesterday?**
Supplier: Learning Seed Company
Format: IIe
Evaluation Level: ACCEPT 1ST
Curriculum Codes: NU
Grade Levels: J S

*What Did You Eat Yesterday?* asks you to enter everything you ate during a 24-hour period. This daily diet will then be compared to the US RDA. The program will also check the percentage of calories from fat in your diet and the amounts of protein and sodium.

**Whatsit Corporation**
Supplier: Sunburst Communications
Format: IIe C64 MSDOS T1000
Evaluation Level: ACCEPT 1ST
Curriculum Codes: MA SS BE
Grade Levels: J

The program helps students sharpen math skills in this realistic simulation of starting and running the *Whatsit Corporation*. This program accommodates 30-40 students and allows them to run a simulated small business for six months. Students get involved in marketing surveys, franchise purchasing, consultant work, problems, financial statements, and hiring and firing workers.

**Where in Time is Carmen Sandiego?**
Supplier: Broderbund
Format: IIe IIgs Mac MSDOS C64
Evaluation Level: ACCEPT 1ST
Curriculum Codes: SS
Grade Levels: I J

*Where in Time is Carmen Sandiego?* offers the opportunity to become a Time Cadet and travel throughout the world and history as you collect and decipher clues which allow you to track down and capture various criminals. It is an interesting enrichment activity.

**Wolves, Explore-A-Science**
Supplier: D.C. Heath and Company
Format: IIe
Evaluation Level: AT INDEPTH
Curriculum Codes: SC
Grade Levels: E I

*Wolves* allows you to explore the wonders of the scientific world while discovering reading and writing.

*Wolves*, a user-friendly package, motivates students through the use of animation. The program provides good support material and multiple copy potential of the student disk. Emphasis is placed on group work, research skills and manipulating and producing scenes.

**Working Drawings, Engineering Drawing 100**
Supplier: Hearlihy & Co.
Format: IIe
Evaluation Level: AT INDEPTH
Curriculum Codes: IT
Grade Levels: J S

The construction of working drawings is covered including the importance of understanding orthographic projection, the relevance of sub-assembly drawings and the importance of title blocks. This program completes the series and could be very useful for assisting in the teaching of introductory and exploratory drafting. It ties the whole series together and completes a series of knowledge which should provide a good understanding of general drafting practice.

**World GeoGraph**
Supplier: Minnesota Ed. Computing Consortium
Format: IIgs
Evaluation Level: ACCEPT 1ST
Curriculum Codes: SS
Grade Levels: I J S

*World GeoGraph* is a geography discovery/learning tool. Its on-screen maps, graphs and databases can be used to explore 177 nations around the world as well as to better understand basic concepts of geography. The focus of of this package is on human geography. PC Globe is a simular product for MSDOS computers. Although the topics match the high school curriculum, some data in a category is insufficient for high school study. It could serve as a quick reference tool for a school library. Data is displayed in both English and metric units.

## Titles Rejected

**Adaptation & Identification**
Supplier: Gage Educational Publishing Company
Format: IIe
Evaluation Level: REJECT 1ST
Curriculum Codes: SC
Grade Levels: I J

In *Adaptation*, graphics of various birds are used to explain how adaptations can enable populations to survive in the environment. In *Identification*, students learn to use the characteristics of animals to identify several different kinds of animals.

Students are presented with a verbal description of an ecological niche and must choose the characteristics of beak, wing and feet which correspond to that niche. However, the scope is far too limited; the material is vague and does not discriminate between important and unimportant characteristics. The glossary is only marginally useful.

**Advanced Structured BASIC 1.0**
Supplier: Nelson Canada Ltd.
Format: IIe
Evaluation Level: REJECT 1ST
Curriculum Codes: CS
Grade Levels: J S

This program is used to generate printed tests. The program selects questions from a prepared set which match the textbook, *Structured BASIC*. True/false and multiple choice questions correspond to each chapter. Questions are at recall level only.

**Adventures in Math 1.0**
Supplier: IBM Canada Ltd.
Format: PCDOS
Evaluation Level: REJECT 1ST
Curriculum Codes: MA
Grade Levels: E I

The program offers drill in arithmetic operations using a dungeons and dragons format. There is no real logic to the dungeon, and the pathways are almost random. The management system keeps track of the 10 highest scores, which have more to do with luck than math acuity. There is questionable motivation in this program.

**AIDS**
Supplier: Orange Juice Software Systems
Format: IIe
Evaluation Level: REJECT DPT
Curriculum Codes: HL FS
Grade Levels: J S

The program provides factual information on the AIDS virus relevant to understanding its effects on the human body, its methods of transmission, and the avoidance of its contraction. Uses only 1988 U.S. statistics.

**Alice, the Personal Pascal**
Supplier: Softsync Inc
Format: MSDOS
Evaluation Level: REJECT 1ST
Curriculum Codes: CS
Grade Levels: S

This is a tutorial package teaching programming in Pascal on an IBM (or MSDOS) computer. The interaction with the programming language is completely controlled. Because syntax errors are trapped as they occur, programming in this environment is slow.

**Alphabet Circus**
Supplier: Developmental Learning Materials
Format: IIe
Evaluation Level: REJECT 1ST
Curriculum Codes: LA
Grade Levels: E

*Alphabet Circus* contains six different activities to aquaint a child with alphabetical order, letter recognition, keyboarding skills, text creation and problem solving. The program focusses totally on letters in isolation as opposed to words in context.

**Ant Farm**
Supplier: Sunburst Communications
Format: IIe
Evaluation Level: REJECT 1ST
Curriculum Codes: PS
Grade Levels: I

The program is a simulation in which a student tries to discover the work pattern of an animated ant. Students are encouraged to make predictions based on information gathered. Students read too much and the method of interaction is inconsistent.

**AppleWorks Integrated Applications for Microcomputers**
Supplier: Nelson Canada Ltd.
Format: IIe
Evaluation Level: REJECT 1ST
Curriculum Codes: UT
Grade Levels: J

*AppleWorks Integrated Applications for Microcomputers* is actually two data disks full of word processing files which guide you through practice sessions while using the *Appleworks* program. The package does not contain a users guide or introduction. There is already sufficient support materials for *Appleworks*. The program is merely shells. The field names are in place but no data has been entered. As a result, the disks are of little use.

**Bank Street MusicWriter**
Supplier: Mindscape, Inc.
Format: IIe
Evaluation Level: REJECT 1ST
Curriculum Codes: MU
Grade Levels: I

*MusicWriter* is a tool for six-part musical composition, editing, and instant playback. This program allows the composer to enter and edit anything from simple melodies to six-part harmonies and complicated rhythmic variations. This program requires that a unique firmware card be inserted into one of the slots of the IIe. We have been unable to obtain a suitable card.

**Bank Street School Filer**
Supplier: Sunburst Communications
Format: IIe C64
Evaluation Level: REJECT 1ST
Curriculum Codes: UT
Grade Levels: I J S

The program is a school file or database program. For students it is valuable as an information collecting and organizing tool. For teachers it is an administrative tool for keeping student records and inventory. The program employs a menu-driven format similar to *Bank Street Writer*. It is very easy to use, but the format of data is not compatible with other programs.

**Bank Street Activity Files**
Supplier: Scholastic-TAB Publications Ltd.
Format: IIe C64 MSDOS
Evaluation Level: REJECT DPT
Curriculum Codes: LA
Grade Levels: I J

*Activity Files* to accompany *Bank Street Writer* is a package which suggests a number of activities to stimulate writing. Students are encouraged to play with words and language and to improve their composition skills and attitudes to writing. Most of the activities in the package are well-known to language teachers in a generic form. They do not need to be presented in this electronic fashion. It may be better for teachers to build paper-based materials that use these kinds of activities so that they could be used with a variety of classroom writing activities or other word processors.

**Basic Electricity**
Supplier: Programs for Learning
Format: IIe
Evaluation Level: REJECT DPT
Curriculum Codes: SC
Grade Levels: S

The three programs in this series are all designed to give practice in applying Ohm's & Kirchoff's Laws to simple D.C. circuits. In each case the student is presented with a circuit diagram and then asked to give the reading on an ammeter or voltmeter. Does not relate to the curriculum guides for physics.

**Blazing Paddles**
Supplier: Baudville
Format: IIe
Evaluation Level: REJECT DPT
Curriculum Codes: UT
Grade Levels: J S T

*Blazing Paddles* is a powerful and easy-to-use drawing program. It allows a variety of input devices to be used to create drawings, diagrams and text. This software provides a good and user-friendly introduction to various aspects of the program such as elementary sketching and drawing, computer-aided graphics and computer-aided design. The program has been replaced by *816/Paint*.

**Body Language Analysis**
Supplier: Orange Juice Software Systems
Format: IIe
Evaluation Level: REJECT 1ST
Curriculum Codes: FS
Grade Levels: J S

The program deals with self-awareness and recognition of the image we present to others. The software deals with family relations, clothing selection and grooming, career education and home economics psychology.

Disk 1 tends to be repetitive; Disk 2 is interactive. Program makes definite statements about personality characteristics based on body language. It is a self-analysis personality questionnaire and is not recommended for use in school.

**Body Transparent**
Supplier: Design Ware, Inc.
Format: C64
Evaluation Level: REJECT 1ST
Curriculum Codes: SC
Grade Levels: J

The program is an exploration of basic human organs in which the student uses a joystick or cursor keys to place organs in correct anatomical position. An incorrect answer disappears too fast for the student to benefit. In review of errors, each and every attempt is shown as a separate error. Most points will always be lost trying to place the most distant organ. Placement of body organs behind other organs is too precise. There is very little difference between right and wrong position.

**Bumble Plot**
Supplier: Learning Company, The
Format: IIe MSDOS
Evaluation Level: REJECT 1ST
Curriculum Codes: MA
Grade Levels: E I

Five games test number line (-2 to +2) in one and two dimensions. Graphing is in Cartesian coordinates. This is a very limited program which deals with negative numbers and graphs (x,y axis) which are too advanced for grades p-4.

**Cadpak — Enhanced C64**
Supplier: Abacus Software, Inc.
Format: C64 C128
Evaluation Level: REJECT DPT
Curriculum Codes: IT
Grade Levels: J

This is a simple simulation of computer-assisted drafting which uses either the keyboard or a light pen as an input. Print-out can be scaled to suit the user. Scaling is English or metric. The program tends to be very confusing with multiple cursors on the screen at the same time. There is not a symbol library. The "Accupoint" feature for positioning of the cursor is confusing, and the light pen doesn't help. The text font is not appropriate to drafting, and the sample pictures are very American.

**Cave Girl Clair**
Supplier: Rhiannon
Format: IIe C64
Evaluation Level: REJECT 1ST
Curriculum Codes: PS
Grade Levels: I

This is an interactive story in which children play out the role of a cave girl who is looking for food and shelter. The adventure game simulation has no specific instructional component. Animals and components only appear randomly. This is slow to play, and typed answers must be exact.

**Challenge Math**
Supplier: Sunburst Communications
Format: IIe
Evaluation Level: REJECT 1ST
Curriculum Codes: MA
Grade Levels: E I

*Challenge Math* is a set of three computer programs designed to give students practice in basic mathematical operations. The program is an electronic workbook. The objectives can be achieved as well with a print workbook.

**Chartpak**
Supplier: Abacus Software, Inc.
Format: C64
Evaluation Level: REJECT 1ST
Curriculum Codes: BE UT
Grade Levels: S

*Chartpak 64* lets you create data charts. It also includes a simple data entry/update facility to allow you to create and adjust your statistical data for charting. The program is not suited to business education. Data must be entered from the keyboard and cannot be input from other files.

**Chelsea of the South Sea Isle**
Supplier: Rhiannon
Format: IIe
Evaluation Level: REJECT 1ST
Curriculum Codes: LA
Grade Levels: E I

This adventure story program is an introduction to computers directed primarily at girls. It is a slow program with very low resolution graphics.

**Classics Old and New, Missing Links**
Supplier: Sunburst Communications
Format: IIe C64 MSDOS
Evaluation Level: REJECT 1ST
Curriculum Codes: LA
Grade Levels: I J

This program is part of the *Missing Links* series. It provides a passage of text with letters missing. The children must try to determine the missing letters using context and syntax clues. A variety of fixed formats is available for blanking out letters including every vowel, every other letter and all but the first letter. Teachers cannot modify the presentation format or text. Although the stories chosen are interesting to students, the lack of context encourages guessing to fill in blanks.

**Classify**
Supplier: Diversified Educational Enterprises Inc.
Format: IIe
Evaluation Level: REJECT 1ST
Curriculum Codes: SC
Grade Levels: S

The program has very little content, no processes and poor concept development.

**Co-Evolution**
Supplier: EduTech
Format: IIe
Evaluation Level: REJECT DPT
Curriculum Codes: SC
Grade Levels: S

Predator/prey simulation leading to evolutionary modification and population adaptation. Students must interactively alter population characteristics. Content and concepts are implicit and may not be clear to students. Simplistic — little more than a game.

**Colonization**
Supplier: Tom Snyder Productions
Format: IIe
Evaluation Level: REJECT DPT
Curriculum Codes: SS
Grade Levels: J S

Students use the experiences of the past to make key decisions about the colonization of space in the future. Social studies facts/skills learning outcomes are doubtful. It is a game and, therefore, not a necessary element.

**Computer Confidence**
Supplier: Nelson Canada Ltd.
Format: IIe
Evaluation Level: REJECT 1ST
Curriculum Codes: CS
Grade Levels: T

The disk and manual are designed for introductory classes in computers and information systems. The disk is used to generate true/false or multiple choice questions to support the text by the same name. The teacher can generate questions or use prepared questions from the diskette, but sample questions are poor examples of recall and guessing.

**Computer Explorations for Business**
Supplier: Collier MacMillan
Format: IIe
Evaluation Level: REJECT DPT
Curriculum Codes: BE
Grade Levels: S

*Computer Explorations for Business* is a hands-on computer program to introduce word processing, data bases, communications, spreadsheet and graphics. The program is very simple and does not meet the needs of the business courses. It attempts to cover too much in too short a time. It does not work with IIgs and the Appletalk network. The function keys do not seem to follow logical sequences.

**Construction Estimator**
Supplier: Hearlihy & Co.
Format: MSDOS
Evaluation Level: REJECT 1ST
Curriculum Codes: IT
Grade Levels: S

This program is used for job cost estimations. Program does not use metric measurements and is oriented more to a business contractor than students in construction technology.

**Critical Issues Pack**
Supplier: Tom Snyder Productions
Format: IIe
Evaluation Level: REJECT DPT
Curriculum Codes: SS
Grade Levels: S

This package combines three programs from *Decisions, Decisions* series. These programs are The Budget Process, Foreign Policy, and Television. The pattern is set as with *Colonization* and *Urbanization* — the software is second to the booklet. Goals of the program are affective; content or skills is not the thrust.

**Critical Thinking I**
Supplier: COMPRIS, Inc.
Format: MSDOS
Evaluation Level: REJECT 1ST
Curriculum Codes: PS
Grade Levels: S

This is a quiz on the nature of thinking. The program has a quiz format with no graphics. Students read too much and most responses are not checked (random characters are accepted as a valid response). The opening screen contains confusing control characters. It is a quiz on the nature of thinking that could be better achieved in a book.

**Daily Planet**
Supplier: School Management Arts Inc
Format: MSDOS
Evaluation Level: REJECT 1ST
Curriculum Codes: SC
Grade Levels: J S

This program consists of sixteen lessons which explore the sun, moon, and the planets. Each lesson contains exercises that interrelate with a computer software and star chart. Does not fit with curriculum guides.

**dBug Computers**
Supplier: Gage Educational Publishing Company
Format: MSDOS
Evaluation Level: REJECT DPT
Curriculum Codes: BE
Grade Levels: S

A business accounting simulation in which students manage a business called "dBug Computers." It offers only selected source documents and is not satisfactory for the accounting program. The only real accounting experience is the determination of debits and credits and some hands-on experience with the computer. The project is copy-protected and not reusable year after year. Annual expenditures for an inadequate program is unrealistic.

**Decimals, Math Tutor**
Supplier: Scholastic-TAB Publications Ltd.
Format: IIe
Evaluation Level: REJECT 1ST
Curriculum Codes: MA
Grade Levels: J

*Decimals* provides an introduction to basic authentic operations with decimal numbers through instruction and practice. Disk I covers reading and writing decimals and mixed decimals, equivalent decimals, and addition and subtraction of decimals. Disk 2 goes on to cover decimals representing thousandths, rounding off decimals, multiplication and division of decimals, rewriting fractions as decimals and rewriting decimals as fractions.

The drill provides no concept development. If a wrong answer is given, a correct answer is automatically displayed with no chance of student intervention. The decimal points do not line up, and a calculator is much better suited for this computational work.

**Decision Making...A Methodical Approach**
Supplier: Orange Juice Software Systems
Format: IIe
Evaluation Level: REJECT DPT
Curriculum Codes: HL FS
Grade Levels: J S

*Decision Making...A Methodical Approach* contains an introduction to decision making and a decision-making simulation. The student enters a personal or hypothetical problem situation and all available options. He/she then responds to a series of methodical questions analysing each option.

Questions are very detailed and not suitable for junior high students who may not yet have faced major decisions. The objectives of the program are more easily, quickly and better accomplished using paper and pencil.

**Delta Drawing**
Supplier: Spinnaker Software Corp.
Format: IIe
Evaluation Level: REJECT 1ST
Curriculum Codes: UT
Grade Levels: I

*Delta Drawing* is a computer program which enables children to create their own colorful drawings on a computer screen. It is run solely with function keys. Because *Delta Drawing* does not make use of a mouse, the ability to draw is very limited and tedious.

**Diary of Back River**
Supplier: Class Software
Format: IIe C64 MSDOS
Evaluation Level: REJECT 1ST
Curriculum Codes: SS
Grade Levels: I J

*Diary of Back River* is a challenging computer-based activity that focusses on certain features of an arctic region near the Boothia Peninsula. These features are: climate, animal and plant life, Inuit culture, land and sea characteristics, and 19th century European arctic exploration. This activity is intended to stimulate student interest and provide information on the arctic.

This program contains relevant data on Franklin's expeditions to the back country. The presentation, however, is uninteresting and the bulk of interaction is filling in missing letters from words on the screen.

**Dispatcher — Green Gold**
Supplier: Canadian Forestry Service
Format: IIe
Evaluation Level: REJECT 1ST
Curriculum Codes: SS
Grade Levels: J

*Dispatcher* aids in understanding supply and demand and the ups and downs in a resource-based industry. The program is designed to show how log transportation occurs. It does not support any aspect of the science, social studies or mathematics programs.

**EduCalc**
Supplier: Grolier Limited
Format: C64
Evaluation Level: REJECT 1ST
Curriculum Codes: UT
Grade Levels: S

*Educalc* is an electronic spreadsheet designed for students and beginning spreadsheet users. Suitable integrated software packages are already available in schools in Nova Scotia.

**English Editor, Missing Links**
Supplier: Sunburst Communications
Format: IIe PCDOS
Evaluation Level: REJECT 1ST
Curriculum Codes: LA
Grade Levels: I J

This program is part of the *Missing Links* series. It provides a passage of text with letters missing. The children must try to determine the missing letters using context and syntax clues. The Editor version allows new text to be entered and stored on the disk. A variety of fixed formats are available for blanking out letters including vowels, every other letter and all but the first letter. Teachers cannot modify the presentation format or the text. Although the stories chosen are of interest to students, the lack of context encourages guessing to fill in the blanks.

**Experiments in Science**
Supplier: HRM Software
Format: IIe
Evaluation Level: REJECT 1ST
Curriculum Codes: SC
Grade Levels: S

Program is not directly related to curriculum. Procedures are too involved and use of data is poor.

**Facemaker**
Supplier: Spinnaker Software Corp.
Format: IIe PCDOS C64
Evaluation Level: REJECT 1ST
Curriculum Codes: UT
Grade Levels: E

This program allows young children to create funny faces and see them come to life. The program is of little use beyond entertainment and computer awareness for very young children. These are not major objectives for computer education in Nova Scotia.

**Fact or Opinion**
Supplier: Hartley Courseware Inc.
Format: IIe
Evaluation Level: REJECT DPT
Curriculum Codes: SS
Grade Levels: I

This is a multi-level program giving the student extensive practice in learning to discriminate between information as fact or opinion. The program does not have much depth. There is no need for this topic to be in software format. It contains American bias.

**Fay, That Math Woman**
Supplier: Didatech Software
Format: C64
Evaluation Level: REJECT 1ST
Curriculum Codes: MA
Grade Levels: I

*Fay, That Math Woman* is a computation drill and practice program with animation. The program uses an animated little old lady who stamps her foot and scolds the user for wrong answers. This is a program in which the negative reinforcement is so entertaining that children will get wrong answers just to see Fay perform. This is not a desired outcome of drill and practice.

**Forest Management**
Supplier: Gold Disk Inc.
Format: IIe
Evaluation Level: REJECT DPT
Curriculum Codes: SC
Grade Levels: J

This program examines silviculture techniques used in softwood woodlot management. The simulation game on silviculture would be useful as a summary event at the end of a unit on forestry. This would show how silviculture techniques, if used effectively, can produce a profitable woodlot.

**Fractions (Part I), Math Tutor**
Supplier: Scholastic-TAB Publications Ltd.
Format: IIe
Evaluation Level: REJECT 1ST
Curriculum Codes: MA
Grade Levels: J

*Fractions (Part I)* provides an introduction to fractions through instruction and practice. The first disk introduces numerator and denominator, proper and improper fractions, and addition, subtraction and multiplication of fractions. The second disk continues with mixed numbers, rewriting improper fractions and equivalent fractions. In the placement test, the wording is confusing. The program is far too rote. The repetition of steps causes the program to be boring. This is "chalk and talk" on a computer screen.

**Fractions (Part II), Math Tutor**
Supplier: Scholastic-TAB Publications Ltd.
Format: IIe
Evaluation Level: REJECT 1ST
Curriculum Codes: MA
Grade Levels: J

*Fractions (Part II)* provides an introduction to fractions through instruction and practice. The first disk introduces least common multiple; greater common factor; and simplifying fractions. Using the second disk, students simplify fractions in order to add, subtract, multiply, and divide proper and improper fractions, and whole and mixed numbers.

In the beginning test the wording is confusing. Once into a mode, it is hard to get out. The repetition of steps causes the program to be boring.

**From the Beginning...Sexually Transmitted Diseases**
Supplier: Orange Juice Software Systems
Format: IIe
Evaluation Level: REJECT DPT
Curriculum Codes: HL FS
Grade Levels: J S

The program offers an introduction to Sexually Transmitted Diseases (STD's), gives a quick quiz on STD's, and gives information on how to stop the spread of STD's.

This software deals with factual, non-judgmental treatment of sexually transmitted diseases. The information can be used individually or in small groups. It is content-based but not necessarily appropriate or relevant to students in the Personal Development and Relationships unit.

**Gears, Strategies in Problem Solving**
Supplier: Sunburst Communications
Format: IIe PCDOS C64 T1000
Evaluation Level: REJECT DPT
Curriculum Codes: PS SC
Grade Levels: J

The program allows students to experiment with gear trains while learning the problem-solving skills of prediction and analysis.

**Genetic Engineering**
Supplier: Helix Educational Software Inc
Format: IIe
Evaluation Level: REJECT DPT
Curriculum Codes: SC
Grade Levels: S

Tutorial program on gene cloning and its applications. Includes recombinant DNA, constructing gene libraries, cloning and diagnosis of genetic disorders through laboratory techniques which are too expensive and time consuming to do in schools. This program consists almost entirely of reading and assimilating content. There are only three short problems.

**Ghost Writer**
Supplier: Minnesota Ed. Computing Consortium
Format: IIe
Evaluation Level: REJECT 1ST
Curriculum Codes: LA
Grade Levels: J S

This program attempts to assist writers in analysing their own writing. The program does not emphasize the important aspects of the writing process. It uses readability formulae and similar strategies for analysing sentence structure. These activities do not assist students in becoming better writers.

**Global Analysis Program**
Supplier: Prentice-Hall Canada Inc.
Format: C64
Evaluation Level: REJECT 1ST
Curriculum Codes: SS
Grade Levels: S

This is a program that allows students to examine patterns and relationships in the world by comparing, manipulating and analysing statistical information for different countries and regions quickly and easily. However, the program prints only in shift mode. If the printer is turned off "device not-present error" aborts program. It doesn't run if "Buscard II" is activated.

**Grammar Examiner**
Supplier: Software Plus
Format: C64 IIe MSDOS
Evaluation Level: REJECT 1ST
Curriculum Codes: UT LA
Grade Levels: J

*Grammar Examiner* is a computer version of a board-game in which a student competes against the computer to test knowledge of grammar. Student mistakes are not explained. Movements of the computer "opponent" don't follow the same patterns as the child player (computer is irrational). It does not accept British spellings (e.g., neighbour) and will not accept "I will" for "I'll." It is a better game than an instructional program.

**GraphMaster**
Supplier: Grolier Limited
Format: IIe
Evaluation Level: REJECT 1ST
Curriculum Codes: UT
Grade Levels: J

*GraphMaster* is an introductory computer graphing program that teaches students how to make basic graphs, gives practice with graphing data, and provides a tool to create and print student-created graphs. Even though the program is easy to use, it has limitations. The user is led by fill-in prompts, but the printing capability is weak. The program does not allow for printing on the common ImageWriter printer.

**Groundworks, 2nd Edition**
Supplier: McGraw-Hill Ryerson Limited
Format: IIe
Evaluation Level: REJECT DPT
Curriculum Codes: UT
Grade Levels: S

*Groundworks* is an integrated computer program that allows you to create, modify, and analyse information using a word processor, database, spreadsheet and graphics. This is a limited function program with reasonable graphics in color. No help is available on-screen and control codes are not logical (e.g., CTRL-A or F to move through menus). Schools already have access to programs which are more user-friendly and more powerful. It requires a number of awkward movements to achieve a fairly simple objective. Once a file name has been stored it cannot be changed.

**Haber — Ammonia Synthesis**
Supplier: COMPRESS Inc.
Format: IIe
Evaluation Level: REJECT 1ST
Curriculum Codes: SC
Grade Levels: S

A computerized simulation of the synthesis of ammonia. *Haber Tech* is the preferred program for this concept.

**Hanalei Bay Wind and Surf**
Supplier: Gage Educational Publishing Company
Format: IIe
Evaluation Level: REJECT DPT
Curriculum Codes: BE
Grade Levels: S

This is an accounting simulation package. It provides the student with a journey through the accounting cycle, but it does not make any use of source documents. This is a very real weakness in attempting to have students analyse concepts of accounting.

**Heat**
Supplier: Cross Educational Software
Format: IIe
Evaluation Level: REJECT 1ST
Curriculum Codes: SC
Grade Levels: S

This is an interface kit for the Apple microcomputer that permits physics experiments on heat. The interface is unreliable and frustrating to set up. Other interfaces are easier to operate.

### Homogeneous Equilibrium

Supplier: COMPRESS (Div. of Queue, Inc.)
Format: IIe
Evaluation Level: REJECT DPT
Curriculum Codes: SC
Grade Levels: S

The program aims to develop an understanding of the quantitative aspects of equilibrium for students following advanced secondary level courses. Limited application and graphical presentations — only parts of the program are suitable for student use. Graphs and data tables cannot be printed. There is not enough interaction between students and program. Effective use requires advanced coaching and understanding of concepts.

### Hometown, A Local Area Study

Supplier: Active Learning Systems
Format: IIe
Evaluation Level: REJECT 1ST
Curriculum Codes: SS
Grade Levels: J

Essentially a database program in which students enter data from a survey of their hometown. Although a worthwhile concept, students should use general purpose database software which is already available in the school.

### Human Pump, The

Supplier: Sunburst Communications
Format: IIe
Evaluation Level: REJECT 1ST
Curriculum Codes: SC
Grade Levels: S

Mechanical and rote approach to what should be a dynamic process.

### I Can Write, Magic Slate

Supplier: Sunburst Communications
Format: IIe
Evaluation Level: REJECT DPT
Curriculum Codes: LA
Grade Levels: E I

A utility program used with the word processor *Magic Slate*, this software helps students organize their writing into a book format. The book writing activities might provide a simple structure to help some young students start writing, although much of the content is not appropriate to elementary (linking verbs and adjectives).

### Immigration

Supplier: Tom Snyder Productions
Format: IIe
Evaluation Level: REJECT DPT
Curriculum Codes: SS
Grade Levels: S

This program allows students to be the President of the United States and make decisions on how to handle thousands of uninvited refugees waiting to land on the shore of the United States.

The program uses the American electoral system as a key factor in the decision to encourage refugees to America and what to do with them when they arrive. The references and statistics are all American. Although the idea of decision making is good, the content is outside Nova Scotia curriculum.

### Improving Economics Reasoning

Supplier: Agency for Instructional Technology
Format: IIe
Evaluation Level: REJECT 1ST
Curriculum Codes: SS
Grade Levels: S

The program uses the computer to simulate a closed economic system operating on a space ship. It demonstrates interdependency of supply and demand. The student is given feedback to indicate right or wrong, but there is little discussion of the wrong answers. Errors are only corrected by completing four answers and then selecting "re-do." Only correct answers are accepted in constructing the space station. It has boring and primitive graphics.

### Incredible Laboratory

Supplier: Sunburst Communications
Format: IIe C64 IBM
Evaluation Level: REJECT 1ST
Curriculum Codes: SC PS
Grade Levels: J

*Incredible Laboratory* teaches problem-solving strategies by having students act as scientists creating fanciful monsters in a laboratory. It takes a long time to understand what is going on. Instructions are not clear. The teacher's guide is essential and useful. However, answers cannot be changed, and the program has poor graphics.

### Integrated Resource Management, Green Gold

Supplier: Canadian Forestry Service
Format: IIe
Evaluation Level: REJECT DPT

*Curriculum Codes:*
*BE Business Education* *CE Career Education* *CS Computer Science* *EC Early Childhood* *FS Family Studies*
*HL Health* *IT Industrial Arts Technology Education* *LA Language Arts* *MA Mathematics*
*MI Miscellaneous* *MU Music* *NU Nutrition* *PE Physical Ed.* *PS Problem Solving*
*SC Science* *SE Special Ed.* *SL Second Language* *SS Social Studies* *UT Utility*

Curriculum Codes: SS SC
Grade Levels: J

This is a game on integrated land use. Students are given a time and guidelines to make decisions on forest use. Students must have background information on generally acceptable land use practices and have developed decision-making skills prior to use of this software. Program does not reflect curriculum.

**IntroCAD**
Supplier: Progressive Peripherals & Software Inc
Format: Amiga
Evaluation Level: REJECT DPT
Curriculum Codes: IT
Grade Levels: J

*IntroCAD* is an introductory computer-assisted drafting program with a mouse driver interface. This software is primarily an elementary drawing program. Although it is possible to do elementary drawings using the program, it is not a drafting program. Dimensioning is not included, and only two thicknesses of line are possible which is fairly limiting.

**Jenny of the Prairie**
Supplier: Rhiannon
Format: IIe
Evaluation Level: REJECT 1ST
Curriculum Codes: PS
Grade Levels: I

This is an adventure story which sets a young girl in the role of heroine. The program operates very slowly.

**Juggle's Butterfly**
Supplier: IBM Canada Ltd.
Format: MSDOS IIe
Evaluation Level: REJECT 1ST
Curriculum Codes: EC
Grade Levels: E

*Juggle's Butterfly* is a simple drill of the concepts right, left, above and below. The directions are more difficult than the content.

**Keyboard Cadet**
Supplier: GLC Silver Burdett
Format: C64 IIe
Evaluation Level: REJECT 1ST
Curriculum Codes: UT
Grade Levels: I

*Keyboard Cadet* is a keyboard tutorial program. This program takes a "video game" approach to keyboarding. Letters or nonsense words are in isolation or floating around the screen.

**Kitchen Safety**
Supplier: Orange Juice Software Systems
Format: IIe
Evaluation Level: REJECT DPT
Curriculum Codes: FS
Grade Levels: J S

This program presents 80 interactive, potentially hazardous situations that require decisions in the kitchen. The program makes it very difficult for the player to reach a goal. The time factor negates the benefit of the concepts it attempts to teach.

**Lauren of the 25th Century**
Supplier: Addison-Wesley Publishers Limited
Format: IIe
Evaluation Level: REJECT 1ST
Curriculum Codes: LA PS
Grade Levels: I J

*Lauren of the 25th Century* is an adventure story in which a young girl is the heroine. The program contains crude graphics and is very slow.

**Learn to Subtract**
Supplier: Grolier Limited
Format: IIe C64
Evaluation Level: REJECT 1ST
Curriculum Codes: MA
Grade Levels: E

The program teaches subtraction facts through three discovery activities using a helicopter to pick up the number of objects or a turtle as a guide to a crossword puzzle. Demonstrations are available at the student's request.

Feedback is independent of student response. Motor controls required are more difficult than the concepts being taught. The content being taught is too simple to waste on the computer. The introduction is too slow and cannot be aborted. The program uses low-order thinking skills in a workbook-like activity.

**Learning to Add & Subtract**
Supplier: L.R. Associates
Format: IIe
Evaluation Level: REJECT DPT
Curriculum Codes: MA PS

Grade Levels: E

*Learning to Add & Subtract* offers three individual programs that provide exhaustive instruction and practice in the basic concepts. Material is not a good substitute for manipulative materials. Models used for addition and subtraction are confusing and do little to help concept development in this area. Pictorial models used are somewhat confusing and tend to promote one-by-one counting.

**Learning to Cope With Pressure**
Supplier: Sunburst Communications
Format: IIe
Evaluation Level: REJECT 1ST
Curriculum Codes: FS
Grade Levels: S

*Learning to Cope With Pressure* is designed to give a method and format for helping students learn to relax and reduce stress. This program integrates the computer with biofeedback in order to teach relaxation skills. Feedback depends on galvanic skin response and is not very sensitive in normal situations.

**Life Science, Data Bases**
Supplier: Scholastic-TAB Publications Ltd.
Format: IIe
Evaluation Level: REJECT 1ST
Curriculum Codes: SC
Grade Levels: J S

This is a creative approach to studying life science. It involves students in organizing, retrieving and interpreting scientific data. The package requires *PFS File* and some parts require *PFS Report*, a program that helps you prepare reports of the data stored using *File*. It provides a tool which makes it easy and fun for students to collect and analyse data in a very short time. While the activities are worthwhile, it is restricted to one file management software package which is not generally available in schools in Nova Scotia.

**Light**
Supplier: Cross Educational Software
Format: IIe
Evaluation Level: REJECT DPT
Curriculum Codes: SC
Grade Levels: S

The package consists of a program and interfaces to experiment with timing using photo diodes. Although the photo cells have many possible uses in analysing speed and motion, the cells are prone to failure and awkward to use. Other photo interfaces are available which are easier to use and more reliable.

**Living Alone**
Supplier: Administration Information Ed. Aids
Format: IIe
Evaluation Level: REJECT 1ST
Curriculum Codes: HL FS
Grade Levels: J S

This program helps students prepare for independent living. Careful consideration is given to problems like living alone or with a roommate, budgets, transportation and jobs.

The program introduces various aspects of living on your own. It might enhance and support a section on independent living for low-level learners (EMH — Grade 10). The program has little depth and insufficient alternatives in budget. Instructions are simple. This might be a supplement only to other instruction.

**Long Division**
Supplier: Educational Activities Inc.
Format: IIe
Evaluation Level: REJECT 1ST
Curriculum Codes: MA
Grade Levels: I

This program is intended for use as a supplement to classroom instruction on the mechanics of long division. The program forces the student to complete even easy questions in a series of steps and does not permit intermediate solutions to be entered. Questions are presented in random order with large changes in levels of difficulty.

**Magical Myths**
Supplier: Unicorn Educational Software
Format: Amiga
Evaluation Level: REJECT DPT
Curriculum Codes: LA
Grade Levels: E I

The material is difficult to read in this program. The vocabulary is not in context and the word processor is very limiting.

**Make It Click**
Supplier: Sunburst Communications
Format: IIe
Evaluation Level: REJECT 1ST
Curriculum Codes: HL
Grade Levels: I J

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*EC Early Childhood*
*FS Family Studies*
*HL Health*
*IT Industrial Arts Technology Education*
*LA Language Arts*
*MA Mathematics*
*MI Miscellaneous*
*MU Music*
*NU Nutrition*
*PE Physical Ed.*
*PS Problem Solving*
*SC Science*
*SE Special Ed.*
*SL Second Language*
*SS Social Studies*
*UT Utility*

This program was designed to help children and adolescents become more conscious of seatbelt safety. Since the use of seatbelts is mandatory in Nova Scotia, this program provides little additional incentive.

**Math Assistant II**
Supplier: Scholastic-TAB Publications Ltd.
Format: IIe
Evaluation Level: REJECT 1ST
Curriculum Codes: MA
Grade Levels: I J

The program was developed to assist the teacher in diagnosing areas where students may have problems in adding, subtracting, multiplying and dividing. Tests can be taken on paper or on the computer. Teachers can generate their own tests.

The program presents questions on the screen one at a time and final answers must be entered from right to left. The difficulty factor of questions progressed too quickly; e.g., First question involved single digit, third was 320 * 668. Students tests can be printed on paper. Teachers can generate their own tests.

**Medalists-Provinces**
Supplier: GLC Silver Burdett
Format: IIe
Evaluation Level: REJECT 1ST
Curriculum Codes: SS
Grade Levels: I

In a game format, students test their knowledge of Canadian provinces and capitals. The disk will hold records of up to 50 students. The program does not allow various correct inputs. The management systems does not work.

**MicroEncyclopedia, Missing Links**
Supplier: Sunburst Communications
Format: IIe C64 PCDOS
Evaluation Level: REJECT 1ST
Curriculum Codes: LA
Grade Levels: I J

This program is part of the *Missing Links* series. It provides a passage of text with letters missing. The children must try to determine the missing letters using context and syntax clues.

A variety of fixed formats are available for blanking out letters including every vowel, every other letter and all but the first letter. Teachers cannot modify the presentation format or text. Although the stories chosen are interesting to students, the lack of context encourages guessing to fill in the blanks.

**Milliken Word Processor**
Supplier: Milliken Publishing Company
Format: IIe
Evaluation Level: REJECT 1ST
Curriculum Codes: UT
Grade Levels: I J

This is an easy-to-use word processing program that has most of the features of the beginning word processors. It is easy to use, but does not add anything to existing acceptable software.

**Modem Manager**
Supplier: MGR Software
Format: IIe
Evaluation Level: REJECT 1ST
Curriculum Codes: UT
Grade Levels: S

This is a communications program for the IIgs. Compared to other communication packages, *Modem Manager* is rather complex.

**Molecular Animator**
Supplier: COMPRESS (Div. of Queue, Inc.)
Format: MSDOS
Evaluation Level: REJECT 1ST
Curriculum Codes: SC
Grade Levels: S

*Molecular Animator* allows the user to view molecular structures in three dimensions. It allows one to generate and modify structures of almost any complexity and then display them on a color monitor with high-speed animation.

*Molecular Animator* is a powerful tool that is useful for generating and displaying molecular stuctures. Although the program is user friendly, students found the creation of new molecular strutures beyond their capabilities. This program would be of better service at a post-secondary level.

**Motion Geometry**
Supplier: McGraw-Hill Ryerson Limited
Format: C64
Evaluation Level: REJECT 1ST
Curriculum Codes: MA
Grade Levels: J

This is a drill and practice program on translations (slides).

**Muppet Learning Keys**
Supplier: Sunburst Communications
Format: IIe

Evaluation Level: REJECT DPT
Curriculum Codes: PS SE
Grade Levels: E

This is a keyboarding program for lower elementary and special education children. The keyboard and accompanying software are a disappointment. The key press is too stiff. The arrangement of keys in alphabetical order appeals to the adult, but may be of no great value to children who are just beginning to use computers. The software *Muppets on Stage* is a trivial number and color recognition course which P-2 children are beyond. It may be appropriate as an exercise in cause and effect for some special needs children.

**Muppet Word Book**
Supplier: Sunburst Communications
Format: IIe
Evaluation Level: REJECT 1ST
Curriculum Codes: LA SE
Grade Levels: E

This program introduces letters, words and writing for lower elementary and special education students. Letters and words are introduced in isolation and not in a meaningful context. It fits more closely with the traditional readiness program. It also includes a simple word processor which has insufficient space for writing meaningful text.

**Muppetville**
Supplier: Sunburst Communications
Format: IIe
Evaluation Level: REJECT DPT
Curriculum Codes: PS SE
Grade Levels: E

*Muppetville* is a software program used for identifying and classifying shapes, colors and numbers. Although creative in its approach, the content is neither "Canadian" nor universal. The program does have some portions which have most appropriate content, however.

**Music Student 1**
Supplier: Associated Computer Services
Format: Amiga
Evaluation Level: REJECT 1ST
Curriculum Codes: MU
Grade Levels: I J

This is a review/drill program dealing with information already learned. The program contains some incorrect information and is tedious.

**Music Studio 2.0**
Supplier: Activision Inc.
Format: IIgs
Evaluation Level: REJECT DPT
Curriculum Codes: MU
Grade Levels: J S

The IIgs version of this music program features pull-down windows and complete music notation. Users can design their own instruments and effects. The program allows a child to experiment and try out different options but has limitations of tone, volume and pitch. It takes a considerable time to master and tends to get tedious after awhile. The program requires one megabyte of memory to run successfully.

**Nationalism — Past & Present**
Supplier: Focus Media Inc.
Format: IIe C64
Evaluation Level: REJECT 1ST
Curriculum Codes: SS
Grade Levels: S

The program offers a step-by-step development leading toward an understanding of nationalism.

Content is very biased towards the U.S. data and narrow view of nationalism.

**Non-Western Cultures**
Supplier: Britannica Learning Materials
Format: C64 IIe
Evaluation Level: REJECT 1ST
Curriculum Codes: SS
Grade Levels: J

*Non-Western Cultures* offers three programs involving questions and answers, hi-resolution graphics of maps, extra help for incorrect responses, and an interactive game format. The program offers a quick summary of basic facts and information. The content is too simple; questions are reduced to trivia.

**Nor'Westers to the Pacific**
Supplier: Hartley Courseware Inc.
Format: IIe
Evaluation Level: REJECT 1ST
Curriculum Codes: SS
Grade Levels: I J

This is a simulation of the North West Fur Traders in 18th century Canada. The program is interactive, but practice is needed in order to get best possible use from the software. It is very cluttered. The strategies could be better accomplished with group discussion.

**North American Database, Bank Street School Filer**
Supplier: Sunburst Communications
Format: IIe C64
Evaluation Level: REJECT 1ST
Curriculum Codes: SS
Grade Levels: J

The program contains a set of data on people, climate, demographics usable only with *Bank Street Filer* database program. Teachers are encouraged to develop relevant databases using software available in their school.

**Noun Puzzlers**
Supplier: Grolier Limited
Format: IIe C64
Evaluation Level: REJECT 1ST
Curriculum Codes: LA
Grade Levels: I

Students are presented with puzzle activities involving nouns including crosswords, limericks and incomplete stories. Scores are kept on how many clues are needed to complete a puzzle. Feedback is independent of student response (regardless of the number of errors. Students are told "all completed"). The introduction is too slow and cannot be aborted. The program uses low-order thinking skills in a workbook-like activity.

**Number Munchers**
Supplier: Minnesota Ed. Computing Consortium
Format: IIe
Evaluation Level: REJECT 1ST
Curriculum Codes: MA
Grade Levels: I

Number Munchers focusses upon several different but complementary mathematical skills. Using a game format, you direct the Number Muncher to "eat" numbers or arithmetic expressions that match a criterion or a "key value." The student needs to use a joystick or the keys A,Z,I,J,K,M to make moves. Students tire of these programs very quickly.

**Nutri Venture**
Supplier: Kellog Company/Nutrition Department
Format: IIe
Evaluation Level: REJECT DPT
Curriculum Codes: NU FS
Grade Levels: J

This program can be used as a self-awareness quiz for students in junior high home economics or health courses that deal with nutrition. Loading time is long and directions complicated. Menu items could be placed on paper more easily. Some menu items are interesting, however.

**Operation Frog**
Supplier: Sunburst Communications
Format: IIe
Evaluation Level: REJECT 1ST
Curriculum Codes: SC
Grade Levels: J S

This program is a simulation of the dissection of a frog. The program uses keyboard, joystick or mouse to move the cursor. Organs can be removed from the "computer" frog using simulated scissors, and a probe can be placed on a body part to retrieve more information from the diskette. A second section allows students to reconstruct the frog at beginner or advanced level.

Dissections and the skills associated with this process cannot be learned nor recreated through this program. Some content and, to a limited extent, review might be accomplished. The program does not have enough information to accurately depict a frog.

**Other Side, The**
Supplier: Tom Snyder Productions
Format: IIe
Evaluation Level: REJECT DPT
Curriculum Codes: SS
Grade Levels: J S

This is a two team computer/board game concerning "Global Conflict." The game simulates the fragile balance between two nations. The game can only be won through negotiation and co-operation. The program is not suited to school use. It is difficult to use and understand and does not reinforce any particular curriculum area.

**Palmetto Insurance Co.**
Supplier: Nelson Canada Ltd.
Format: IIe
Evaluation Level: REJECT DPT
Curriculum Codes: BE
Grade Levels: S

A limited accounting simulation program.

**Percents, Ratios & Proportions — Math Tutor**
Supplier: Scholastic-TAB Publications Ltd.
Format: IIe
Evaluation Level: REJECT 1ST

Curriculum Codes: MA
Grade Levels: I J

Disk 1 covers practice in decimal point placement, reading and writing percents, writing percents, writing percents as decimals, solving percents problems and word problems, writing decimals as percents, and writing fractions as percents.

Disk 2 covers practice in writing ratios both as fractions and percents, solving ratio word problems, setting up proportions, and solving proportions word problems. If the student does not enter the correct answer, the program simply gives more drill. The percent sign is graphically poor.

**Playwriter's Theatre**
Supplier: Jostens Learning Systems Inc.
Format: IIe
Evaluation Level: REJECT 1ST
Curriculum Codes: LA UT
Grade Levels: S

Program requires a relatively expensive Ufonic Voice Synthesizer (US$245) be installed in the computer.

**Polynomial Practice**
Supplier: Sunburst Communications
Format: IIe
Evaluation Level: REJECT 1ST
Curriculum Codes: MA
Grade Levels: S

*Polynomial Practice* is designed to provide practice involving identifying and computing with polynomials. For subtraction and division, the tile representations and the development are not concrete. Questions might as well be given in drill and practice.

**Practicalc II 2.07**
Supplier: Practicorp Ltd
Format: IIe
Evaluation Level: REJECT 1ST
Curriculum Codes: UT BE
Grade Levels: S

*Practicalc II* is an electronic spreadsheet program. The help screen is accessible by pressing CTRL-A. Most commands are accessed with a backslash followed by a single letter (e.g., "O" for options). Files can be imported from Viscalc, DIF and ASCII formats. The program contains functions such as sum, count, maximum, minimum, average and trigonometry functions. Worksheets are erased from memory when new files are loaded from disk, but no warning is given. Replication of cell references is either absolute or relative, but not mixed. Display can be set to 40 or 80 columns while worksheet is loaded.

**Pro-Grammar/Pro-Sentence**
Supplier: Nelson Canada Ltd.
Format: IIe
Evaluation Level: REJECT 1ST
Curriculum Codes: LA
Grade Levels: J S

A program designed to teach and reinforce basic grammar rules and sentence building. This is merely drill and practice using isolated examples aimed at helping students learn the rules.

**Problem Solving, Math Prep 7 Series**
Supplier: McGraw-Hill Ryerson Limited
Format: C64
Evaluation Level: REJECT 1ST
Curriculum Codes: MA
Grade Levels: J

*Problem Solving* attempts to teach limited problem-solving strategies from the *Math Prep 7* series using "key words" and "choose the operation." The program uses only typical sets of word problems found in many texts.

**Quest for Canada**
Supplier: GLC Silver Burdett
Format: IIe C64
Evaluation Level: REJECT 1ST
Curriculum Codes: SS
Grade Levels: J

This is a simulation of early explorers in 16th century Canada. The program is interactive but needs a great deal of instruction and practice to be of value. There seems to be little control of the ship, land and direction.

**Read-A-Rama**
Supplier: Unicorn Educational Software
Format: Amiga
Evaluation Level: REJECT DPT
Curriculum Codes: LA
Grade Levels: E

This is a talking program for young children who are just beginning to learn to read and spell. This software is totally unsuitable for elementary classrooms. It contains inappropriate voice tones and

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pictures. It offers a very slow process for getting information about a few pictures.

**Reader Rabbit**
Supplier: Learning Company, The
Format: IIe IIgs
Evaluation Level: REJECT 1ST
Curriculum Codes: LA
Grade Levels: E

This is a program designed to teach children how to read. It is a readiness activity. The "gs" version makes excellent use of the speech synthesizer built into the computer. However, it is basically a drill-and-practice program where students recognize and sort three-letter words by letter or by matching with a crude picture.

**Reading and Me**
Supplier: Davidson and Assoc.Inc.
Format: IIe
Evaluation Level: REJECT 1ST
Curriculum Codes: EC LA
Grade Levels: E

*Reading and Me* is geared for children ages 4-7. It motivates children with sound, color and animation through 12 sequentially presented learning games. A certificate is printed whenever a child completes an activity. *Reading and Me* contains graphics, feedback and simplicity. However, the program is fragmented and does not offer enough for each reading ability level included.

**Revolution — Past, Present, Future**
Supplier: Focus Media Inc.
Format: IIe
Evaluation Level: REJECT DPT
Curriculum Codes: SS
Grade Levels: S

This package contains five disks exploring "What is a Revolution?," "Historical Models: Revolutions of the Past," "How to Analyse a Revolution," "Graphing Revolutions of the Past" and "Graphing Revolutions of the Present and Future." The plotting of graphs in Part 4 is most helpful. The graphs may be saved and printed out. On a color monitor, the overlay of three different colored graphs is very effective. In Parts 1 to 3 almost all the material is in print. It requires a great deal of reading of text on the computer screen. The material and concepts may be covered more expeditiously by the classroom teacher.

**Revolutionary Wars**
Supplier: Tom Snyder Productions
Format: IIe
Evaluation Level: REJECT DPT
Curriculum Codes: SS
Grade Levels: J S

This program allows students to be Governor of a fictitious province experiencing a revolutionary movement among some of its citizens. The Governor gets caught in the middle and students learn that there's not always a clear division of winners and losers in a revolution. The software is unnecessary for this program's objectives to be realized; reading the student booklet will do it.

**Rocky's Boots**
Supplier: Learning Company, The
Format: IIe C64 MSDOS
Evaluation Level: REJECT 1ST
Curriculum Codes: PS CS
Grade Levels: S

This is a program for exploring logic circuits using an animated technique. Students will analyse and build simple electronic circuits using components found in digital computers. The technical design, through the use of color, sound and animation, makes the program more suitable for elementary students, but the content is more appropriate for upper junior high as mature reading level and attention span are required. The program presents an interesting approach to teaching logic.

**Simulation Construction Kit**
Supplier: Hartley Courseware Inc.
Format: IIe
Evaluation Level: REJECT 1ST
Curriculum Codes: UT
Grade Levels: S

Permits users to design and construct a simulation similar to the *Search Series*. Instructions in creating computer simulations would have more direct application in a course on programming or in a computer science program. Participants who already understand programming could use this product in specific science related areas.

**Smoking Decision, The**
Supplier: Sunburst Communications
Format: IIe
Evaluation Level: REJECT 1ST
Curriculum Codes: HL
Grade Levels: J

An interactive format, students identify health risks associated with cigarette smoking. This program provides very limited interaction and is USA based.

**Songwriter**
Supplier: Scholastic-TAB Publications Ltd.
Format: IIe
Evaluation Level: REJECT 1ST
Curriculum Codes: MU
Grade Levels: I J

*Songwriter* is a program which uses math and music to learn about musical scales, rhythm, structure, and the mathematics of fractional notes. The program is inaccurate and lacks clarity. Sequence is not sufficiently developed, there is no instructional component and the method of interaction inconsistent. Positive feedback is not appropriate and the user does not have appropriate control over the program. Displays are poorly designed and sound is not used effectively. The program did not run correctly.

**Spreadsheets for Math & Science**
Supplier: Minnesota Ed. Computing Consortium
Format: IIe
Evaluation Level: REJECT 1ST
Curriculum Codes: MA SC
Grade Levels: J S

This spreadsheet is divided into groups by age level and covers a variety of topics ranging from the very simple to the complex. Examples include determining the value of "pi" experimentally; balancing a food chain; and exploring negative, positive, and decimal exponents. Teacher's manual includes teacher notes and student activity sheets. Requires AppleWorks. The program is useful only for demonstration and is not practical for a class activity. Similar activities can be done better with worksheets and by building own spreadsheets.

**Stickybear ABC**
Supplier: Scholastic-TAB Publications Ltd.
Format: IIe
Evaluation Level: REJECT 1ST
Curriculum Codes: LA
Grade Levels: E

This program tries to help the very young learn the alphabet. The program covers too much in one sitting, incremental steps within the program are too large and there is insufficient practice. Students read too much and/or interact too little with the program. Question randomization is ineffective. A book with more examples could be just as or more effective.

**Stickybear Opposites**
Supplier: Xerox Education Publications
Format: IIe C64
Evaluation Level: REJECT 1ST
Curriculum Codes: EC
Grade Levels: E

This is a program especially designed to familiarize children from ages three to six with the concept of opposites. The program has a child select opposites using the arrow keys. It is difficult to get out of once the program starts. There is no good reason to use the computer in this way. There are better ways to accomplish these goals.

**Stickybear Shapes**
Supplier: Xerox Education Publications
Format: IIe C64
Evaluation Level: REJECT 1ST
Curriculum Codes: EC
Grade Levels: E

*Stickybear Shapes* is a shape recognition program. The user cannot easily recognize the cursor shape or get out of a game once it starts. There is no good reason to use the computer in this way.

**Story Tree**
Supplier: Scholastic-TAB Publications Ltd.
Format: IIe C64
Evaluation Level: REJECT 1ST
Curriculum Codes: LA
Grade Levels: J

This is a program for generating interactive fiction. One of the weaknesses is the great range of students it is aimed at. Whether you work with second graders, or high school students, the degree of success in meeting one or all of the objectives will vary greatly depending on the grade level. The program is slow and tedious and will require much teacher intervention to explain the nature of an interactive story.

**Structured Basic Testbank**
Supplier: Gage Educational Publishing Company
Format: IIe
Evaluation Level: REJECT 1ST
Curriculum Codes: CS
Grade Levels: S

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*SC Science SE Special Ed. SL Second Language SS Social Studies UT Utility*

This is a collection of test items to complement the *Structured Basic Tutorial*. Contrary to the title, this is not structured programming. It is a text-based drill using simple BASIC language statements. Text does not wrap around on screen and has words broken. All text is upper case.

**Structured Basic Tutorial**
Supplier: Gage Educational Publishing Company
Format: IIe
Evaluation Level: REJECT 1ST
Curriculum Codes: CS
Grade Levels: J S

This is a disk-based tutorial in BASIC programming geared to the textbook *Structured Basic*.

**Success with Reading**
Supplier: Scholastic-TAB Publications Ltd.
Format: IIe C64
Evaluation Level: REJECT DPT
Curriculum Codes: LA
Grade Levels: I J

*Success With Reading* consists of a program disk package and separate programs for levels d-e-f, refer to passages of text from the *Apple Paperback*" series for young readers.

Content fits in well with the "novel program" currently popular in many schools. The "cloze" activities are able to be easily completed without reading the novel. The value is that the students must pay attention to the written word in order to comprehend and complete the sentence with the correct word; emphasis is placed on spelling as words spelled incorrectly are not accepted. The novel program was well suited to the "regular" students. Students experiencing problems with comprehension or spelling may be easily discouraged. The high achievers could possibly be challenged by more words to fill in, or more difficult passages.

**SuperPrint**
Supplier: Scholastic-TAB Publications Ltd.
Format: IIe
Evaluation Level: REJECT 1ST
Curriculum Codes: UT
Grade Levels: J

This program allows users to create and print multicolored posters, cards and banners. The program won't allow centring from top to bottom, can't delete a phrase after the return button has been hit, and requires a lot of disk swapping.

**Surface of Earth, The — Language of Maps**
Supplier: Focus Media Inc.
Format: IIe
Evaluation Level: REJECT 1ST
Curriculum Codes: SS
Grade Levels: J S

This program deals with mapping skills for the social studies program. Content is marred not only by extreme American bias but also by blatant mapping inaccuracies (e.g., missing countries, islands and provinces — Japan, New Zealand, Tasmania, Newfoundland, P.E.I., etc.). Interaction is too limited and simple to be movating or challenging.

**Suspect Sentence**
Supplier: Ginn & Co. Educational Publishers
Format: IIe
Evaluation Level: REJECT 1ST
Curriculum Codes: LA
Grade Levels: I

The program is designed to sharpen student reading comprehension skills while helping them to focus on the characteristics and techniques of good writing. The teacher's guide contains ideas which could be applied in either setting. Selections displayed on the computer screen are not interesting and seem contrived. It may help students recognize capital letters and punctuation but is unlikely to increase reading comprehension. The program runs very slowly.

**Teacher's Quiz Designer, Version 1.0**
Supplier: IBM Canada Ltd.
Format: PCDOS
Evaluation Level: REJECT 1ST
Curriculum Codes: UT
Grade Levels: T

The program creates a multiple-choice test which can be administered on screen or on paper. The program creates disk-based or paper multiple-choice quizzes without instructional assistance. Wrong answers are indicated and then student advances to the next question. The only teacher options are to identify question, right answer, and wrong answer. This is an inappropriate testing model.

**Term Paper Writer**
Supplier: Personal Choice Software
Format: IIe
Evaluation Level: REJECT 1ST
Curriculum Codes: UT
Grade Levels: J S

The program offers a section for each part of the process of writing an essay which requires quotations, footnotes and bibliography. *Term Paper Writer* has little to recommend it over a word processing program for most students. It lacks a spelling checker. It takes more time to operate than common word processing programs given familiarity with both programs, although *Term Paper Writer* does offer a sense that organizing ideas is a good plan.

### Terrapin Music Logo

Supplier: Terrapin
Format: IIe
Evaluation Level: REJECT 1ST
Curriculum Codes: UT
Grade Levels: I

This program uses the syntax of *Terrapin Logo* to generate and play simple music. The program requires an amplifier, speaker and game paddles to run. It may be motivational for young LOGO learners, but is not recommended for use in music classes.

### Thinktank

Supplier: Living Videotext, Inc.
Format: IIe MSDOS Mac
Evaluation Level: REJECT 1ST
Curriculum Codes: UT
Grade Levels: S T

This is an idea processor which permits users to generate and manipulate an outline of ideas. Relationship can be easily modified. "Outlining" is an option included within powerful word processing software such as *Microsoft Word 4.0*.

### Those Amazing Reading Machines

Supplier: Minnesota Ed. Computing Consortium
Format: IIe
Evaluation Level: REJECT 1ST
Curriculum Codes: LA
Grade Levels: E I

The *MECC Reading Collection* helps students in Grades P-6 sharpen their reading skills in three main areas: sound/letter association, word analysis and reading comprehension. The concept underlying the program is acceptable; however, there are two major weaknesses — graphics are unclear and comprehension depends on memorizing unrelated strings of information.

### Tobbs Learns Algebra

Supplier: Sunburst Communications
Format: IIe
Evaluation Level: REJECT 1ST
Curriculum Codes: MA
Grade Levels: I

The program uses an operation table format to manipulate a single algebraic expression. While the program's design and content are acceptable, the technical design is inappropriate for the target age group. In advanced levels, calling for help simply supplies the correct answer. The absence of an explanation detracts from an otherwise potentially valuable package.

### Touch 'n Write

Supplier: Sunburst Communications
Format: IIe
Evaluation Level: REJECT 1ST
Curriculum Codes: SE
Grade Levels: E I

This is a complete 21-lesson curriculum based on the Palmer Method of manuscript handwriting. It is designed to be used with the "Touch Window" attachment for the computer. Students who have difficulty with cursive writing may find it difficult to trace letters on the upright computer screen.

### Trio

Supplier: Softsync Inc
Format: IIe
Evaluation Level: REJECT 1ST
Curriculum Codes: UT
Grade Levels: J S

*Trio* is made up of three integrated programs: a word processor, a financial spreadsheet and a data manager. The program is fairly easy to use, but aborts totally when the help screen or disk commands are called up in the word processor mode. All sections of the program use a similar command structure, and commands are displayed in a menu at the bottom of the screen. The spreadsheet contains a feature to print formulas with column reference. Spreadsheet references are similar to *Multiplan* (r[1] c [3]), and using this structure will create either relative or absolute cell references. Erasing a block is accomplished with specific cell references, not highlighting. Basic mathematical functions are available. The database contains only row and column display of data. Data can be transferred between modes when first saved to disk.

*Curriculum Codes:*
*BE Business Education*
*HL Health*
*MI Miscellaneous*
*SC Science*
*CE Career Education*
*IT Industrial Arts Technology Education*
*MU Music*
*SE Special Ed.*
*CS Computer Science*
*NU Nutrition*
*SL Second Language*
*EC Early Childhood*
*LA Language Arts*
*PE Physical Ed.*
*SS Social Studies*
*FS Family Studies*
*MA Mathematics*
*PS Problem Solving*
*UT Utility*

**Ugly Duckling, Robot Readers**
Supplier: Hilton Android Corporation
Format: Amiga
Evaluation Level: REJECT DPT
Curriculum Codes: LA
Grade Levels: E

This is the story of the Ugly Duckling with poor voice and inappropriate word analysis strategies.

**Up the Creek**
Supplier: Class Software
Format: IIe C64 MSDOS
Evaluation Level: REJECT 1ST
Curriculum Codes: SS
Grade Levels: I J

*Up the Creek* is a simulation of a canoe trip into the Canadian wilderness. The extensive use of graphics makes the program suitable to a wide range of student abilities. Major flaws in the program include the seriously inadequate depth (facilitating only superficial learning), inaccuracies and misrepresentations, and non-current information. Students are not required to demonstrate understanding of content nor do they have the opportunity to manipulate the programmed content. Each new use of the program offers identical choices, with wrong choices invariably resulting in the termination of the program.

**Urbanization**
Supplier: Tom Snyder Productions
Format: IIe
Evaluation Level: REJECT DPT
Curriculum Codes: SS
Grade Levels: S

As mayor of a peaceful little town, students must decide how to manage their town's growth when a valuable resource is found there. As with *Colonization*, there is little advantage in the skills area, some advantages in the content area — most of it from the student reference book, but not from the software.

**USA Profile**
Supplier: Active Learning Systems
Format: IIe
Evaluation Level: REJECT 1ST
Curriculum Codes: SS
Grade Levels: I J S

To increase student skills in organizing and understanding many forms of data, using information collected from the United States. Database ignores accomplishments of Blacks in the USA.

**Vertebrate Biology Keyword, Science Keyword Series**
Supplier: Focus Media Inc.
Format: IIe
Evaluation Level: REJECT 1ST
Curriculum Codes: SC
Grade Levels: S

*Keyword* is a method for helping students to remember key vocabulary words and concepts associated with the curriculum. Through the use of examples, definitions and applications, students must determine the "mystery words" most closely associated with the clues. The program is a text-based game where students are given single word clues and are required to guess the technical word. Little context is provided for each word. Letters are filled in automatically after several clues.

**Wally's Word Works**
Supplier: Sunburst Communications
Format: IIe C64
Evaluation Level: REJECT 1ST
Curriculum Codes: LA
Grade Levels: I

The program is designed to drill grammar in a game format. The emphasis of this program is to apply language study in isolation. It does not use the student's own language. This program does not fit with provincial guidelines.

**Water Pollution**
Supplier: Educational Materials and Equipment Co.
Format: IIe
Evaluation Level: REJECT 1ST
Curriculum Codes: SC
Grade Levels: J S

*Water Pollution* is an interactive simulation which reviews the basics of water pollution including physical properties of water, types of water pollution, fish kills, biochemical oxygen demand, dissolved oxygen levels, and water treatment and allows students to set up and run water pollution experiments.

The important concept of pollution is unsuccessfully explored in this program which falls short even of its potential. Objectives remain general throughout. Shortcoming of the presentation include contradictions and errors in the limited pool of quiz items, insufficient branching, inadequate supply of detailed information, omissions in screen displays (e.g., failure to specify degrees in temperature designations; failure to define abbreviated terminology) and restricted exit and printout options (e.g., graphs can not be printed).

**Waves in a Linear Medium, Introduction**
Supplier: Merlan Scientific
Format: IIe
Evaluation Level: REJECT 1ST
Curriculum Codes: SC
Grade Levels: S

This is a program designed for the instruction of wave motion. Displays are poorly designed and graphics are not used effectively. Although not sophisticated, this is appropriate for the learner. It is difficult to slow down a wave and assign different variables.

**Weather, The**
Supplier: Grolier Limited
Format: IIe C64
Evaluation Level: REJECT 1ST
Curriculum Codes: EC
Grade Levels: E

In *The Weather* the student selects items such as flags and clouds in response to a weather cue.

Feedback in the program is independent of student response. (Regardless of the number of errors, students are told "good work.") Motor Controls required are more difficult than the concepts being taught. Cursor movement is too slow and the introduction is too long. It would be better to use felt board activities.

**Western Civilization**
Supplier: Focus Media Inc.
Format: IIe
Evaluation Level: REJECT 1ST
Curriculum Codes: SS
Grade Levels: S

This is a question and answer tutorial on three historical periods in a game format. The only instruction is negative feedback. It may be useful for drill, but the content is too simple.

**What is a Noun?**
Supplier: Grolier Limited
Format: IIe C64
Evaluation Level: REJECT 1ST
Curriculum Codes: LA
Grade Levels: I

The program is a clue-based game to identify nouns. Points are awarded and scores are kept on the disk. This game to identify nouns accepts only the correct answer, e.g., "something to wear" is "sweater" not "clothes." The content varies too widely from "capital of Australia" to "a red fruit."

**Whole Brain Spelling**
Supplier: Sublogic Corp
Format: IIe C64 MSDOS
Evaluation Level: REJECT 1ST
Curriculum Codes: LA
Grade Levels: E I

The goals of *Whole Brain Spelling* are to develop visual imaging skills for spelling, offer spelling practice lists, and diagnose and indicate areas for self-correction. Words are presented out of context. Visual skill is independent of meaning. Word lists are arranged by increased spelling difficulty not vocabulary difficulty.

**Whole Numbers**
Supplier: McGraw-Hill Ryerson Limited
Format: C64
Evaluation Level: REJECT 1ST
Curriculum Codes: MA
Grade Levels: J

This is a drill and practice program on whole numbers. The "Skill" portion of the program is rather lengthy. There is a tendency to move too quickly to shortcuts (e.g., "count the zeros...").

**Wordquest**
Supplier: Sunburst Communications
Format: IIe C64
Evaluation Level: REJECT 1ST
Curriculum Codes: LA
Grade Levels: I J

The program consists of two games which deal with binary search. It increases students vocabulary while improving sequencing skills such as alphabetical order. It is an automated workbook. It does nothing more than ask a simple question and then sends you off to look in the encyclopedia.

**Worksheet Wizard II**
Supplier: Edusoft
Format: IIe
Evaluation Level: REJECT 1ST
Curriculum Codes: MA

*Curriculum Codes:*
*BE Business Education*
*CE Career Education*
*CS Computer Science*
*EC Early Childhood*
*FS Family Studies*
*HL Health*
*IT Industrial Arts Technology Education*
*LA Language Arts*
*MA Mathematics*
*MI Miscellaneous*
*MU Music*
*NU Nutrition*
*PE Physical Ed.*
*PS Problem Solving*
*SC Science*
*SE Special Ed.*
*SL Second Language*
*SS Social Studies*
*UT Utility*

Grade Levels: I J

This is a software program to generate "personalized" worksheets relating to fraction concepts and operations. The focus is on "lower level" computation practice. Exercises of this type are easy to find in texts when required. The program lacks applications and good problems which require the learner to think.

**Worksheet Wizard III**
Supplier: Edusoft
Format: IIe
Evaluation Level: REJECT 1ST
Curriculum Codes: MA
Grade Levels: I J

This is a software program to generate "personalized" worksheets relating to decimal concepts and operations. The focus is on "lower level" computation practice. Exercises of this type are easy to find in texts when required. The program lacks applications and good problems which require the learner to think.

**World Geography Canada**
Supplier: Class Software
Format: IIe C64 MSDOS
Evaluation Level: REJECT 1ST
Curriculum Codes: SS
Grade Levels: J S

The program consists of five parts: Continents and Oceans, Canada and its Provinces, Canada and its Waters, Canadian Facts, and Cities and Abbreviations. Students are presented with a number of drills or quizzes in each category. For example, in "Canada and its Provinces," students study general facts about each province or territory including location, size, population, major industries, major cities and year in which it joined Confederation.

The data presented by the program is grossly inconsistent with Statistics Canada data and is assumed to be the result of a programming error. For example, the major industry for Newfoundland is shown as manufacturing while fishing is almost nonexistent. The publisher reports that updates are not available.

**Writing a Character Sketch**
Supplier: Minnesota Ed. Computing Consortium
Format: IIe
Evaluation Level: REJECT 1ST
Curriculum Codes: LA
Grade Levels: J

This is an interactive program to guide students by questions and examples to characterize a person. The program is slow with crude graphics and discusses only the external characteristics of a character. The activities could be better completed with pencil and paper.

**Writing a Narrative**
Supplier: Minnesota Ed. Computing Consortium
Format: IIe
Evaluation Level: REJECT 1ST
Curriculum Codes: LA
Grade Levels: J

The program consists of three prewriting activities — "Idea Storming," "Catch the Moments" and "Point of View." Ideas to brainstorm are limited to simple, gross shapes. The student is asked to brainstorm about a rope or box shape by generating words to describe its sight, smell, shape and surface features, etc. Single word answers to unrelated questions (not of a student's choosing) do not assist in writing a narrative. What is a narrative remains unknown. Print resources currently listed like *Bridges* are more appropriate vehicles for the teaching of narrative voice.

**Writing an Opinion Paper**
Supplier: Minnesota Ed. Computing Consortium
Format: IIe
Evaluation Level: REJECT 1ST
Curriculum Codes: LA
Grade Levels: S

The program is designed for young adults who are learning to explore a topic, formulate an opinion and assemble, organize and examine evidence. The program includes a simple word processor. The program contains a tutorial and drill to differentiate between fact and opinion. The activity which explores a topic uses the subject of "competency testing" which is not relevant to most students. The program requires much reading of text from the screen which might as well be presented in a student booklet.

**Writing Skills, Volume 3**
Supplier: Peachtree Software
Format: IIe
Evaluation Level: REJECT 1ST
Curriculum Codes: LA
Grade Levels: J

It is awkward to correct text. The pretest is too long without feedback. If both disk drives are used, program does not load correctly. Both diskettes must be in drive 1. Student cannot advance until entire pretest is completed in one session. Disk is not updated to indicate 3/4 complete when student stops.

**Writing to Read**
Supplier: IBM Canada Ltd.
Format: PCDOS
Evaluation Level: REJECT 1ST
Curriculum Codes: LA
Grade Levels: E

This is a drill and practice program and an organizational structure involving reading, writing, and letter recognition. This program runs counter to the philosophy and methodology of early childhood language development and instruction as described in the Nova Scotia language arts guide.

**Young People's Literature, Missing Links**
Supplier: Sunburst Communications
Format: IIe C64 PCDOS
Evaluation Level: REJECT DPT
Curriculum Codes: LA
Grade Levels: I J

This program is part of the *Missing Links* series. It provides a passage of text with letters missing. The children must try to determine the missing letters using context and syntax clues. A variety of fixed formats are available for blanking out letters including every vowel, every other letter and all but the first letter. Teachers cannot modify the presentation format or text. Although the stories chosen are interesting to students, the lack of context encourages guessing to fill in blanks.

## Titles Delisted

**AppleWorks (French) 1.4**
Supplier: Apple Canada Inc.
Format: IIe
Evaluation Level: DELISTED
Curriculum Codes: UT
Grade Levels: J S T

An integrated word processor, spreadsheet, and database program for the Apple II microcomputers. It is menu-driven, has help available and comes with a full tutorial and using French IIe keyboard, displays most French characters. Product is no longer available.

**Bank Street Writer C64, Revised**
Supplier: Broderbund
Format: C64
Evaluation Level: DELISTED
Curriculum Codes: UT
Grade Levels: I J

The educational version of this product is no longer available.

**Eureka — The Solver**
Supplier: Borland International
Format: MSDOS
Evaluation Level: DELISTED
Curriculum Codes: MA
Grade Levels: S

*Eureka — The Solver* is a program for solving algebraic equations, application problems such as linear programming and problems in chemistry and physics. Those familiar with *Turbo Basic* and *Turbo Pascal* will find it very friendly.

This program will solve a number of equations in any number of unknowns. It will graph any function and is good for analysing functions for maxima and minima. The program is capable of basic calculus. It has a *Wordstar*-like report generator which is handy for print-outs and is easy to use with pull-down menus and windows. Out of print.

**Gertrude's Puzzles**
Supplier: Learning Company, The
Format: IIe MSDOS
Evaluation Level: DELISTED
Curriculum Codes: PS MA
Grade Levels: E

*Gertrude's Puzzles* is a program for exploring attributes and developing logic and problem-solving strategies. It is a problem-solving program in which a child manipulates puzzle pieces on the screen. The puzzles are interesting and challenging. The program would supplement work done with attribute blocks and other manipulative materials. This program is no longer available for the C64. Out of print.

**Gertrude's Secrets**
Supplier: Learning Company, The
Format: IIe C64 MSDOS
Evaluation Level: DELISTED
Curriculum Codes: PS MA
Grade Levels: E

Children will solve a puzzle that depends on observing patterns and attributes in color and shape. *Gertrude's Secrets* consists of three types of puzzles with several levels of difficulty. A child manipulates colored shapes to solve problems involving similarities and differences. This program is a good supplement to the work on attributes and developing problem-solving skills. A color monitor is necessary, and some teacher support at the beginning would be needed. Out of print.

**Motion Geometry, Nelson**
Supplier: Nelson Canada Ltd.
Format: IIe
Evaluation Level: DELISTED
Curriculum Codes: MA
Grade Levels: J

*Motion Geometry* creates a learning environment for working with the concepts of reflections, translations and rotations (flips, slides, and turns). These are concepts of transformational geometry and are developed in the junior high mathematics curriculum. This program uses the graphics, color and sound of the computer in a unique and motivating fashion to involve the learner in a process of reasoning, experimenting and predicting. Out of Print.

**Paperclip**
Supplier: Batteries Included
Format: C64
Evaluation Level: DELISTED
Curriculum Codes: UT
Grade Levels: S

This a word processing program for the C64 that contains a spell checker. *Paperclip* is a sophisticated word processing program designed for intermediate and experienced users. It is relatively easy to use, but contains no menus or help screens. Print formatting is accomplished with a control character and a letter or number and the results are not visible on the screen during editing. The C64 version contains an 80-column screen preview mode which displays the formatted document in relatively final form. A tutorial is included in the manual. In order to use the program a bit lock must be present in the computer. Program has been superseded by more powerful packages.

**PFS First Choice 2.01**
Supplier: Gage Educational Publishing Company
Format: MSDOS
Evaluation Level: DELISTED
Curriculum Codes: UT
Grade Levels: J S

*First Choice* lets you work with four types of applications — word processing, spreadsheets, file management, and communications in a single package. Based on and compatible with the PFS series, it is an easy-to-use menu driven program. Files can be input and output in ASCII format. The database portion uses nontypical file format. Other more flexible programs are available.

**Sexually Transmitted Diseases**
Supplier: HRM Software
Format: IIe MSDOS
Evaluation Level: DELISTED
Curriculum Codes: HL
Grade Levels: J S

This program is designed to give students up-to-date information on sexually transmitted diseases. Each section has an optional test. The program is no longer available.

**Superplot**
Supplier: Edusoft
Format: IIe
Evaluation Level: DELISTED
Curriculum Codes: MA
Grade Levels: S

*Superplot* is a program for plotting any polynomial, trigonometric, logarithmic or exponential functions, up to five at a time. The graphs can be scrolled left, right, up or down; and the limits can be easily adjusted. Strengths of the program include the ability to superimpose graphs. A weakness is the difficulty in determining the value of any one point because of a lack of labels. The program could be used effectively by individuals or in a large class demonstration. This program is out of print.

**TML Pascal**
Supplier: TML Systems
Format: IIgs
Evaluation Level: DELISTED
Curriculum Codes: UT CS
Grade Levels: S

*TML Pascal* is a programming language designed to use a mouse-based interface on the IIgs. This version of the Pascal programming language requires a minimum of 768K of memory and at least one 3.5," 800 K disk drive. It has a fast, memory-resident compiler and is easy to use with students who are new to programming. The 256-page manual is difficult for new users to read, but the program could be used successfully with any standard Pascal textbook. It lacks provision for run time and error trapping. A mouse is recommended. No longer available.

## Titles Not Yet Evaluated

| Title of Software | Available Formats | Curriculum Code |
|---|---|---|
| A Way (to Learn) With Waggs | IIe MSDOS | LA |
| A Wrinkle in Time | IIe | LA |
| A.I. | IIe | PS |
| Ace Reporter | IIe | LA PS |
| Action Writer | MSDOS | UT BE |
| Basic Electricity & Related Review | Mac | IT |
| Beauty of Fractals Lab | Mac | SC |
| Beyond the Beginning...Early Childhood | IIe | HL FS |
| Beyond the Beginning...The Infant | IIe | HL FS |
| Body Lab Module 3 | IIe | HL PE |
| Breaking the Barriers | IIe MSDOS Mac | MA SC |
| Buddy's Body | IIe | EC |
| Business | IIe | MA BE |
| Child Development— The Game Format Study Aid | IIe | HL FS |
| Classroom Action Manager | MSDOS | UT |
| Classroom Edition | IIe | UT |
| Cleo is a Dragon! | IIe MSDOS | LA |
| CompuQuiz | C64 | UT |
| Computer Assisted Writing | IIe | LA |
| Computer Graphing Experiment #1 | IIe | MA |
| Computer Graphing Experiment #2 | IIe | MA |
| Computer Graphing Experiment #3 | IIe | MA |
| Computer Inventory Procedures | MSDOS T1000 | PE |
| Computer Keyboarding | IIe C 64 MSDOS | UT |
| Computer Type | C64 | UT |
| Computers in Physics Instruction | All Versions | SC |
| Cost of Raising a Child | IIe | FS |
| Crunch | Mac | UT |
| Data Analysis | IIe | MA |
| Data Grabber | IIe | SC |
| Dazzle Draw | IIe | UT |
| Dr. B. Careful | IIgs | HL FS |
| Dr. Pascal | MSDOS | CS |
| Draw Plus | IIgs | IT |
| Earthquake Lab | IIe MSDOS | SC |
| Easy Street | IIe | LA |
| Equations | C64 | MA |
| Equations, Challenge Matches | IIe | MA |
| Feelings | IIe | EC |
| Filevision | Mac | UT |
| First Draft | IIe | LA |
| Food for Thought | IIe | NU |
| Food Labels | IIe | HL FS |
| Four Magics of Mandalay | IIe | LA |
| Function Machine (Level II) | IIe | MA |
| Geology Search | IIe | SC |
| Hook A Book | IIe | UT LA |
| HyperScreen | IIe | LA UT |
| Integers | C64 | MA |
| Investigating Conservation of Energy | IIe | SC |
| Investigating Acceleration | MSDOS | SC |
| Keep Your Balance | IIe | MA |
| Keyboarding Skill Development | MSDOS | BE |
| KidTalk | Mac Amiga | LA |

| | | |
|---|---|---|
| Laboratory Simulations | IIe | SC |
| Learn to Type | IIe PCDOS T1000 | UT |
| Learning Math with LogoWriter | IIe | MA |
| Lifeline Nutrition | IIe | HL FS |
| Math — Solving Story Problems | IIe | MA |
| MathTalk | Mac | MA PS |
| Micro-Logic II | MSDOS | IT |
| Microsoft Chart | Mac | UT BE |
| Microsoft Filer | Mac | UT BE |
| Microtools | MSDOS IIe T1000 | UT |
| Miner's Cave | IIe | SC |
| Model Diet | C64 | NU |
| Modeler — Molecular Design Editor | PCDOS | SC |
| Monty's Musical Horn | MSDOS | MU |
| My Life As A Video Game | IIe | LA |
| Mysteries in the Making | IIe MSDOS | LA |
| Mystery Objects | IIe | SC |
| Newton's Laws | IIe | SC |
| Notes | MSDOS | LA |
| Number Farm | IIe | MA |
| Osmosis | IIe | SC |
| Parenting Profile, The | IIe | HL FS |
| Particle Dynamics & Gravity | MSDOS | SC |
| PC Nations | MSDOS | SS |
| PC USA 2.0 | MSDOS | SS |
| Perimeter & Area | C64 | MA |
| Personal Newsletter | C64 IIe | UT |
| Photo | IIe | UT |
| Physical Science, Data Base | IIe | SC |
| Physics — A Practical Approach | C64 | SC |
| Planetary Construction Set | IIe | SC |
| Plate Tectonics | IIe MSDOS T1000 | SC SS |
| Play Together/Learn Together | IIe | EC UT |
| Playing with Science — Motion | IIe | SC |
| Pollution Patrol | IIe | SS SC |
| Program Writer | IIe | CS |
| Proteus | IIe | LA |
| Protutor Accounting 1 | MSDOS IIe IIgs | BE |
| Quattro Pro | MSDOS | BE |
| Radioactive Decay | IIe | SC |
| Ratio | C64 | MA |
| Reaction Energetics | IIe | SC |
| Rock Doctor | IIe | SC |
| Sampling-Probability & Prediction | IIe | MA |
| Scuffy and Friends | IIe | LA |
| Spell It! | C64 | LA |
| Spellworks | IIe | UT |
| Statistics and Intuition | IIe | MA |
| Stella | Mac | BE |
| Strategy | IIe T1000 | BE |
| Teacher's Pal, The | IIe MSDOS | UT |
| Teaching Thinking Skills | IIe | CS |
| Tell Star | MSDOS | SC |
| Tell Star II | MSDOS | SC |
| This is the Way We Wash Our Face | IIe | EC |
| Trading Post | IIe MSDOS T1000 | SS |
| Transverse Waves | IIe | SC |
| Turtle Symmetry (Level II) | IIe | MA |

| | | |
|---|---|---|
| Unprintable Physics | IIe | SC |
| Using Appleworks in the Classroom | IIe | UT |
| Wave Addition II | IIe | SC |
| Weather Wizards | IIe | SC |
| Week in the Life Of | MSDOS | HL FS |
| WordPerfect | IIgs | UT BE |
| Work and Energy | IIe | SC |

## Titles Sorted by Curriculum Code

### Business Education

ACCPAC Bedford, Industry Standard
Bedford Accounting, Student Edition
Chartpak
Computer Explorations for Business
dBug Computers
DrawPerfect
Grammatik III
Hanalei Bay Wind and Surf
Individual Training for WP
Lotus 1-2-3, Industry Standard
Lotus 1-2-3, Student Edition
MathType
Microcomputer Keypad Operation
Microsoft Excel
Microsoft QuickBASIC
Microsoft Word
Palmetto Insurance Co.
Practicalc II
Whatsit Corporation
WordPerfect
WordPerfect (French)

### Career Education

InSight — Your Career Planning

### Computer Science

Advanced Structured BASIC
Alice, the Personal Pascal
Computer Confidence
dBASE IV
Microsoft QuickBASIC
Oxford Pascal
Rocky's Boots
Structured Basic Testbank
Structured Basic Tutorial
TurboPascal

### Early Childhood

Juggle's Butterfly
Reading and Me
Stickybear Opposites
Stickybear Shapes
Weather, The

### Family Studies

AIDS
Body Language Analysis
Decision Making...A Methodical Approach
Dinner Party
Foods — The Digestive System
From the Beginning... Contraception
From the Beginning... Reproduction System and Conception
From the Beginning...Sexually Transmitted Diseases
Home Hunter
Kitchen Safety
Learning to Cope With Pressure
Living Alone
Nutri Venture
Parent Pit, The
Rape Awareness and Prevention Exercise
Say kNOw
Stress and the Young Adult

### Health

AIDS
Biofeedback Microlab
Biosolve 1 — Internal Medicine
Biosolve 2 — Infectious Disease
Biosolve 3 — Toxicology
Decision Making...A Methodical Approach
Dinner Party
Foods — The Digestive System
From the Beginning... Contraception
From the Beginning... Menstruation
From the Beginning... Reproduction System and Conception
From the Beginning...Sexually Transmitted Diseases
Health Risk Appraisal
Home Hunter
Living Alone
Make It Click
Parent Pit, The
Rape Awareness and Prevention Exercise
Redlights, Greenlights
Say kNOw
Smoking Decision, The
Stress and the Young Adult

### Industrial Arts Tech. Ed.

816/Paint
Aldus PageMaker, Student Edition
Auto Sketch
Auxiliary View Drawings
Basic Graphic Principles
Caddraw
CADKEY 1
Cadpak
Car Builder
CNC Lathe (Part I) — CNC Machining & Program
CNC Lathe (Part II) — CNC Machining & Program
Computereyes
Construction Estimator
Design Your Own Home — Architecture
Dimension Techniques
DiscoverCAD II
Easy CAD
Generic CADD, Level 1
Generic CADD, Level 3.0
Geo Construction of Lines, Arcs
Geo Construction Using Figures
IntroCAD
Mac-3D
MacDraft
Multiview Drawing
PFS First Publisher
Portable Woodworking Equipment
Publish It
Robcat
Section View Drawings
Small Engine Repair Shop
SuperPaint
Working Drawings

### Language Arts

Alphabet Circus
AppleWorks GS
Bank Street StoryBook
Bank Street, Activity Files
Be A Writer
Chelsea of the South Sea Isle
Children's Writing and Publishing Center
Classics Old and New
Crossword Magic (Revised)
English Editor
Ghost Writer
Grammar Examiner
Halo Island, Mystery on
I Can Write
Lauren of the 25th Century
Magical Myths
MicroEncyclopedia

Muppet Word Book
Noun Puzzlers
Playwriter's Theatre
Pro-Grammar/Pro-Sentence
Puzzler
Read-A-Rama
Reader Rabbit
Reading and Me
School Speller
Stickybear ABC
Story Tree
Success with Reading
Success with Writing
Super Story Tree
Suspect Sentence
Those Amazing Reading Machines
Type to Learn
Ugly Duckling
Wally's Word Works
What is a Noun?
Whole Brain Spelling
Word Play
Wordquest
Writer's Helper Stage II
Writing a Character Sketch
Writing a Narrative
Writing an Opinion Paper
Writing Skills, Volume 3
Writing to Read
Young People's Literature

### Mathematics

Addition, Math Tutor
Adventures in Math
Adventures with Charts & Graphs — Project Zoo
Building Perspective
Bumble Games
Bumble Plot
Challenge Math
CHAOS Plus
Code Quest
Decimals, Math Tutor
Division, Math Tutor
Elastic Lines
Fay — That Math Woman
Fractions (Part I)
Fractions (Part II)
Geometric preSupposer
Geometric Supposer — Circles
Geometric Supposer — Quadrilaterals
Geometric Supposer — Triangles
Gnee or Not Gnee, Discrimination, Attributes & Rules
Graphing Equations/Green Globs
High Wire Logic, Discrimination, Attributes & Rules
HoltMath 7
Iggy's Gnees, Discrimination, Attributes & Rules
Interpreting Graphs, Escape
King's Rule
Learn to Subtract
Learning to Add & Subtract
Long Division
Math Activities Courseware 7
Math Activities Courseware 8
Math Assistant II
Math Blaster
Mathematics Exploration Toolkit
More Teasers from Tobbs
Motion Geometry
Multiplication, Math Tutor
Number Munchers
Number Quest
Odd One Out, Discrimination, Attributes & Rules
Percents, Ratios & Proportions, Math Tutor
Plane View
Polynomial Practice
Problem Solving
Puzzle Tanks
Regrouping, Memory — A First Step
Right Turn
Semantic Calculator (Sem Calc)
Spreadsheets for Math & Science
Subtraction, Math Tutor
Survival Math
Teasers by Tobbs With Whole Numbers
Teddy's Playground, Discrimination, Attributes & Rules
Ten Clues, Discrimination, Attributes & Rules
Tip 'N Flip, Discrimination, Attributes & Rules
Tobbs Learns Algebra
Visualizing Algebra, The Function Analyzer
Whatsit Corporation
Whole Numbers
Word Play
Worksheet Wizard II
Worksheet Wizard III

### Music

Bank Street Music Writer
Deluxe Music Construction Set
Jam Session
Listen
Music Student 1
Music Studio
Songwriter

### Nutrition

Grab A Byte
Nutri Venture
What Did You Eat Yesterday?

### Physical Education

Canada Fitness Award
Health Risk Appraisal

### Problem Solving

Algernon
Alpine Tram Ride
Ant Farm
Building Perspective
Cave Girl Clair
Code Quest
Color Keys
Critical Thinking 1
Crosscountry Canada
Discrimination Attributes & Rules
Factory, The
Gears — Strategies in Problem Solving
Gnee or Not Gnee, Discrimination, Attributes & Rules
High Wire Logic, Discrimination, Attributes & Rules
HoltMath 7
Iggy's Gnees, Discrimination, Attributes & Rules
Incredible Laboratory
Jenny of the Prairie
Lauren of the 25th Century
Learning to Add & Subtract
Memory Castle, Memory — The First Step
Memory the First Step
Muppet Learning Keys
Muppetville
Odd One Out, Discrimination, Attributes & Rules
Plane View
Plato's Cave
Pond, The
Puzzle Tanks
Regrouping, Memory — A First Step
Rocky's Boots

- Simon Says..., Memory — A First Step
- Superfactory, The
- Teddy and Iggy, Memory — A First Step
- Teddy's Playground, Discrimination, Attributes & Rules
- Ten Clues, Discrimination, Attributes & Rules
- Tip 'N Flip, Discrimination, Attributes & Rules
- What is in a Frame?, Memory — A First Step

## Science

- Adaptation & Identification
- Advanced Genetics
- Adventures with Charts & Graphs — Project Zoo
- Atomic Physics
- Basic Electricity
- Biofeedback Microlab
- Biosolve 1 — Internal Medicine
- Biosolve 2 — Infectious Disease
- Biosolve 3 — Toxicology
- Body Transparent
- Catlab
- Cells, Structure & Functions
- CHAOS Plus
- Chemical Collisions
- Classify
- Co-Evolution
- Collisions on an Air Track
- Conservation Laws
- Daily Planet
- Desert
- Discovery
- Discovery Lab
- Energy Search
- Enlist Micros Workshop Unit
- Experiments in Science
- Forest Management
- Gears — Strategies in Problem Solving
- Genetic Engineering
- Graphical Analysis III
- Gravity
- Haber Tech
- Haber — Ammonia Synthesis
- Heat
- Homogeneous Equilibrium
- Human Genetic Disorders
- Human Pump, The
- Incredible Laboratory
- Integrated Resource Management — Green Gold
- Life Science, Data Bases
- Light
- Molecular Animator
- Oh Deer
- Operation Frog
- Optics
- Photosynthesis & Respiration
- Playing with Science — Temperature
- Science Toolkit, Module 1 — Speed and Motion
- Science Toolkit Plus (Master Module)
- Sir Isaac Newton's Games
- Sky Travel
- Spreadsheets for Math & Science
- Tracks
- Vertebrate Biology Keyword
- Volcanoes, Earth Science
- Water Pollution
- Waves in a Linear Medium, Introduction
- Whales
- Wolves

## Social Studies

- Colonization
- Critical Issues Pack
- Crosscountry Canada
- Diary of Back River
- Discover the World
- Dispatcher — Green Gold
- Economics — What, How & For Whom?
- Fact or Opinion
- Geo World
- Global Analysis Program
- Hidden Agenda
- Hometown, A Local Area Study
- Immigration
- Improving Economics Reasoning
- Integrated Resource Management — Green Gold
- Jenny's Journey
- Medalists-Provinces
- Nationalism — Past & Present
- Non-Western Cultures
- Nor'Westers to the Pacific
- North American Database
- One World Countries Database
- Other Side, The
- PC Globe
- Quest for Canada
- Revolution — Past, Present, Future
- Revolutionary Wars
- SimCity
- Surface of Earth, The — Language of Maps
- Up the Creek
- Urbanization
- USA Profile
- Western Civilization
- Whatsit Corporation
- Where in the World is Carmen Sandiego?
- Where in Time is Carmen Sandiego?
- Word Play
- World GeoGraph
- World Geography Canada

## Special Education

- Math Blaster
- Muppet Learning Keys
- Muppet Slate
- Muppet Word Book
- Muppets on Stage
- Muppetville
- Talking Text Writer
- Touch 'n Write
- Touchwindow

## Utilities

- Aldus PageMaker
- Aldus PageMaker, Student Ed.
- AppleWorks
- Appleworks Integrated Applications for Microcomputers
- Auto Sketch
- Bank Street School Filer
- Bank Street Speller
- Bank Street StoryBook
- Bank Street Writer III
- Better Working Eight In One
- Blazing Paddles
- Chartpak
- Children's Writing and Publishing Center
- Computereyes
- Crossword Magic (Revised)
- Delta Drawing
- Desk Top Library
- Easy CAD
- EduCalc
- Facemaker
- Grammar Examiner
- Grammatik III
- Graphic Expander, Vol. 1
- GraphMaster
- Groundworks
- Keyboard Cadet
- Logo (Terrapin)

Logo II (LSCI) — Apple Logo II
LogoWriter Intermediate
MacDraft
Magic Slate II
MathType
Microphone II
Microsoft Excel
Microsoft Word
Microsoft Works
Milliken Word Processor
Modem Manager
Mousetalk (ASCII Express)
MultiScribe
Newsroom
PFS First Publisher
Playwriter's Theatre
Pocket Filer 2
Pocket Planner 2
Pocket Writer 2
Practicalc II
PrintMaster
Print Shop, The
Publish It
Quick Card
Ready, Set, Go
Sensible Grammar
Sensible Speller
Simulation Construction Kit
Slide Shop
Super Story Tree
Superkey
SuperPaint
SuperPrint
SuperPrint II
Talking Text Writer
Teacher's Quiz Designer
Term Paper Writer
Terrapin Music Logo
Thinktank
Timeout Graph
Timeout Quickspell
Trio
TurboPascal
Ultra Key
WordPerfect
WordPerfect (French)

## Titles Sorted by Grade Level

### Elementary P-3

Addition, Math Tutor
Adventures in Math
Adventures with Charts & Graphs — Project Zoo
Alphabet Circus
Bank Street Writer III
Be A Writer
Bumble Games
Bumble Plot
Challenge Math
Chelsea of the South Sea Isle
Desert
Discrimination, Attributes & Rules
Division, Math Tutor
Facemaker
Gnee or Not Gnee, Discrimination, Attributes & Rules
I Can Write
Iggy's Gnees, Discrimination, Attributes & Rules
Juggle's Butterfly
Learn to Subtract
Learning to Add & Subtract
Magic Slate II
Magical Myths
Math Blaster
Memory — The First Step
Multiplication, Math Tutor
Muppet Learning Keys
Muppet Slate
Muppet Word Book
Muppets on Stage
Muppetville
Odd One Out, Discrimination, Attributes & Rules
Pond, The
PrintMaster
Print Shop, The
Read-A-Rama
Reader Rabbit
Reading and Me
Regrouping, Memory — A First Step
Simon Says..., Memory — A First Step
Stickybear ABC
Stickybear Opposites
Stickybear Shapes
Subtraction, Math Tutor
SuperPrint II
Talking Text Writer
Teasers by Tobbs With Whole Numbers
Teddy and Iggy, Memory — A First Step
Teddy's Playground, Discrimination, Attributes & Rules
Those Amazing Reading Machines
Touch 'n Write
Touchwindow
Tracks
Type to Learn
Ugly Duckling
Weather, The
Whales
What is in a Frame?, Memory — A First Step
Whole Brain Spelling
Wolves
Word Play
Writing to Read

### Intermediate 4-6

Adaptation & Identification
Addition, Math Tutor
Adventures in Math
Adventures with Charts & Graphs — Project Zoo
Algernon
Alpine Tram Ride
Ant Farm
Bank Street Music Writer
Bank Street School Filer
Bank Street Speller
Bank Street StoryBook
Bank Street, Activity Files
Bank Street Writer III
Be A Writer
Bumble Games
Bumble Plot
Cave Girl Clair
Challenge Math
Chelsea of the South Sea Isle
Children's Writing and Publishing Center
Classics Old and New
Code Quest
Color Keys
Delta Drawing
Deluxe Music Construction Set
Desert
Diary of Back River
Discovery
Discrimination, Attributes & Rules
Division, Math Tutor
Elastic Lines
English Editor
Gnee or Not Gnee, Discrimination, Attributes & Rules
Fact or Opinion
Factory, The
Fay — That Math Woman
From the Beginning... Menstruation
Halo Island, Mystery on
High Wire Logic, Discrimination, Attributes & Rules
I Can Write
Iggy's Gnees, Discrimination, Attributes & Rules
Jenny of the Prairie
Jenny's Journey
Keyboard Cadet
King's Rule
Lauren of the 25th Century
Listen
Logo (Terrapin)
Logo II (LSCI) — Apple Logo II
LogoWriter Intermediate
Long Division
Magic Slate II
Magical Myths
Make It Click
Math Assistant II
Medalists-Provinces
Memory Castle, Memory — The First Step
Memory — The First Step
MicroEncyclopedia
Milliken Word Processor
More Teasers from Tobbs
Multiplication, Math Tutor
Music Student 1
Newsroom
Nor'Westers to the Pacific
Noun Puzzlers
Number Munchers
Number Quest
Odd One Out, Discrimination, Attributes & Rules
Percents, Ratios & Proportions, Math Tutor
Plane View

Playing with Science, Temperature
Pond, The
PrintMaster
Print Shop, The
Puzzle Tanks
Puzzler
Redlights, Greenlights
Right Turn
Semantic Calculator (Sem Calc)
Science Toolkit, Module 1 — Speed and Motion
Science Toolkit Plus (Master Module)
Slide Shop
Songwriter
Subtraction, Math Tutor
Success with Reading
Super Story Tree
SuperPrint II
Survival Math
Suspect Sentence
Talking Text Writer
Teasers by Tobbs With Whole Numbers
Teddy's Playground, Discrimination, Attributes & Rules
Ten Clues, Discrimination, Attributes & Rules
Terrapin Music Logo
Those Amazing Reading Machines
Tip 'N Flip, Discrimination, Attributes 7 Rules
Tobbs Learns Algebra
Touch 'n Write
Touchwindow
Tracks
Type to Learn
Ultra Key
Up the Creek
USA Profile
Wally's Word Works
Whales
What is a Noun?
What is in a Frame?, Memory — A First Step
Where in the World is Carmen Sandiego?
Where in Time is Carmen Sandiego?
Whole Brain Spelling
Wolves
Wordquest
Worksheet Wizard II
Worksheet Wizard III
World GeoGraph
Young People's Literature

**Junior 7-9**

816/Paint
Adaptation & Identification
Advanced Structured BASIC
AIDS
Aldus PageMaker, Student Ed.
AppleWorks
AppleWorks GS
AppleWorks Integrated Applications for Microcomputers
Auto Sketch 2.0
Bank Street School Filer
Bank Street Speller
Bank Street, Activity Files
Bank Street Writer III
Basic Graphic Principles
Blazing Paddles
Body Language Analysis
Body Transparent
Building Perspective
Caddraw
Cadpak
Car Builder
Cells, Structure & Functions
Children's Writing and Publishing Center
Classics Old and New
Colonization
Computereyes
Crosscountry Canada
Crossword Magic (Revised)
Daily Planet
Decimals, Math Tutor
Decision Making...A Methodical Approach
Deluxe Music Construction Set
Design Your Own Home — Architecture
Desk Top Library
Diary of Back River
Dimension Techniques
Dinner Party
Discover the World
DiscoverCAD II
Discovery
Discovery Lab
Dispatcher — Green Gold
Elastic Lines
English Editor
Foods — The Digestive System
Forest Management
Fractions (Part I)
Fractions (Part II)
From the Beginning... Contraception
From the Beginning... Menstruation
From the Beginning... Reproduction System and Conception
From the Beginning...Sexually Transmitted Diseases
Gears — Strategies in Problem Solving
Generic CADD, Level 3.0
Geo Construction of Lines, Arcs
Geo Construction Using Figures
Geo World
Geometric preSupposer
Ghost Writer
Grab A Byte
Grammar Examiner
Graphic Expander, Vol. 1
GraphMaster
Health Risk Appraisal
HoltMath 7
Home Hunter
Hometown, A Local Area Study
Human Genetic Disorders
Incredible Laboratory
InSight — Your Career Planning
Integrated Resource Management, Green Gold
Interpreting Graphs, Escape
IntroCAD
Jam Session
King's Rule
Kitchen Safety
Lauren of the 25th Century
Life Science, Data Bases
Listen
Living Alone
Logo (Terrapin)
Logo II (LSCI) — Apple Logo II
LogoWriter Intermediate
Magic Slate II
Make It Click
Math Activities Courseware 7
Math Activities Courseware 8
Math Assistant II
MicroEncyclopedia
Microsoft Works
Milliken Word Processor
Motion Geometry
More Teasers from Tobbs
Mousetalk (ASCII Express)
MultiScribe
Multiview Drawing
Music Student 1
Music Studio
Newsroom

Non-Western Cultures
Nor'Westers to the Pacific
North American Database
Nutri Venture
Oh Deer
Operation Frog
Other Side, The
Parent Pit, The
PC Globe
Percents, Ratios & Proportions,
 Math Tutor
PFS First Publisher
Photosynthesis & Respiration
Plane View
Plato's Cave
Playing with Science —
 Temperature
Pocket Filer 2
Pocket Planner 2
Pocket Writer 2
PrintMaster
Print Shop, The
Pro-Grammar/Pro-Sentence
Problem Solving
Publish It
Puzzle Tanks
Quest for Canada
Rape Awareness and Prevention
 Exercise
Revolutionary Wars
Right Turn
Say kNOw
School Speller
Science Toolkit, Module 1 —
 Speed and Motion
Science Toolkit Plus (Master
 Module)
Semantic Calculator (Sem Calc)
Sim City
Sir Isaac Netwon's Games
Sky Travel
Slide Shop
Smoking Decision, The
Songwriter
Spreadsheets for Math & Science
Story Tree
Stress and the Young Adult
Structured Basic Tutorial
Success with Reading
Success with Writing
Superfactory, The
Superkey
SuperPaint
SuperPrint
SuperPrint II
Surface of Earth, The —
 Language of Maps
Survival Math
Ten Clues, Discrimination,
 Attributes & Rules
Term Paper Writer
Timeout Graph
Timeout Quickspell
Tip 'N Flip, Discrimination,
 Attributes & Rules
Touchwindow
Trio
Type to Learn
Ultra Key
Up the Creek
USA Profile
Visualizing Algebra, The
 Function Analyzer
Water Pollution
What Did You Eat Yesterday?
Whatsit Corporation
Where in Time is Carmen
 Sandiego?
Whole Numbers
Wordquest
Working Drawings
Worksheet Wizard II
Worksheet Wizard III
World GeoGraph
World Geography Canada
Writer's Helper Stage II
Writing a Character Sketch
Writing a Narrative
Writing Skills, Volume 3
Young People's Literature

## Senior 9-12

ACCPAC Bedford, Industry
 Standard
Advanced Genetics
Advanced Structured BASIC
AIDS
Aldus PageMaker
Aldus PageMaker, Student Ed.
Alice, the Personal Pascal
AppleWorks
AppleWorks GS
Atomic Physics
Auxiliary View Drawings
Bank Street School Filer
Bank Street Writer III
Basic Electricity
Basic Graphic Principles
Bedford Accounting, Student
 Edition
Better Working Eight In One
Biofeedback Microlab
Biosolve 1 — Internal Medicine
Biosolve 2 — Infectious Disease
Biosolve 3 — Toxicology
Blazing Paddles
Body Language Analysis
CADKEY 1
Car Builder
Catlab
Cells, Structure & Functions
CHAOS Plus
Chartpak
Chemical Collisions
Classify
CNC Lathe (Part I) — CNC
 Maching & Program
CNC Lathe (Part II) — CNC
 Maching & Program
Co-Evolution
Collisions on an Air Track
Colonization
Computer Explorations for
 Business
Computereyes
Conservation Laws
Construction Estimator
Critical Issues Pack
Critical Thinking I
Daily Planet
dBASE IV
dBug Computers
Decision Making...A Methodical
 Approach
Deluxe Music Construction Set
Design Your Own Home —
 Architecture
Desk Top Library
Dimension Techniques
Dinner Party
DiscoverCAD II
DrawPerfect
Easy CAD
Economics — What, How &
 For Whom?
EduCalc
Experiments in Science
Foods — The Digestive System
From the Beginning...
 Contraception
From the Beginning...
 Reproduction and
 Conception
From the Beginning...Sexually
 Transmitted Diseases
Generic CADD Level 1
Generic CADD, Level 3.0
Genetic Engineering
Geo Construction of Lines, Arcs
Geo World
Geometric preSupposer
Geometric Supposer — Circles
Geometric Supposer —
 Quadrilaterals

Geometric Supposer — Triangles
Ghost Writer
Global Analysis Program
Grammatik III
Graphic Expander, Vol. 1
Graphical Analysis III
Graphing Equations/Green Globs
Gravity
Groundworks
Haber Tech
Haber — Ammonia Synthesis
Hanalei Bay Wind and Surf
Health Risk Appraisal
Heat
Hidden Agenda
Home Hunter
Homogeneous Equilibrium
Human Genetic Disorders
Human Pump, The
Immigration
Improving Economics Reasoning
Individual Training for WP
InSight — Your Career Planning
Jam Session
Kitchen Safety
Learning to Cope With Pressure
Life Science, Data Bases
Light
Living Alone
Logo (Terrapin)
Logo II (LSCI) — Apple Logo II
Lotus 1-2-3, Industry Standard
Lotus 1-2-3, Student Edition
Mac-3D
MacDraft
Magic Slate II
Mathematics Exploration Toolkit
MathType
Microcomputer Keypad Operation
Microphone II
Microsoft Excel
Microsoft QuickBASIC
Microsoft Word
Microsoft Works
Modem Manager
Molecular Animator
Mousetalk (ASCII Express)
MultiScribe
Music Studio
Nationalism — Past & Present
Oh Deer
One World Countries Database
Operation Frog
Optics
Other Side, The
Oxford Pascal
Palmetto Insurance Co.
Parent Pit, The
PC Globe
PFS First Publisher
Plato's Cave
Playwriter's Theatre
Pocket Filer 2
Pocket Planner 2
Pocket Writer 2
Polynomial Practice
Portable Woodworking Equipment
Practicalc II
PrintMaster
Pro-Grammar/Pro-Sentence
Publish It
Rape Awareness and Prevention Exercise
Ready, Set, Go
Revolution — Past, Present, Future
Revolutionary Wars
Robcat
Rocky's Boots
Science Toolkit Plus (Master Module)
Section View Drawings
Sensible Grammar
Sensible Speller
SimCity
Simulation Construction Kit
Sir Isaac Newton's Games
Small Engine Repair Shop
Spreadsheets for Math&Science
Stress and the Young Adult
Structured Basic Testbank
Structured Basic Tutorial
SuperPaint
Surface of Earth, The — Language of Maps
Term Paper Writer
Thinktank
Timeout Graph
Timeout Quickspell
Trio
TurboPascal
Ultra Key
Urbanization
USA Profile
Vertebrate Biology Keyword
Visualizing Algebra, The Function Analyzer
Volcanoes, Earth Science
Water Pollution
Waves in a Linear Medium, Introduction
Western Civilization
What Did You Eat Yesterday?
WordPerfect
WordPerfect (French)
Working Drawings
World GeoGraph
World Geography Canada
Writer's Helper Stage II
Writing an Opinion Paper

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Basic Electricity & Related Review 65
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Beyond the Beginning...The Infant 65
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Dr. Pascal 65
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DrawPerfect 21
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